

# **State of Connecticut**

## **Strategic Plan**

**for**

## **Traffic Records**

**June 2009**



**CT-TRCC**

**Connecticut - Traffic Records Coordinating Committee**

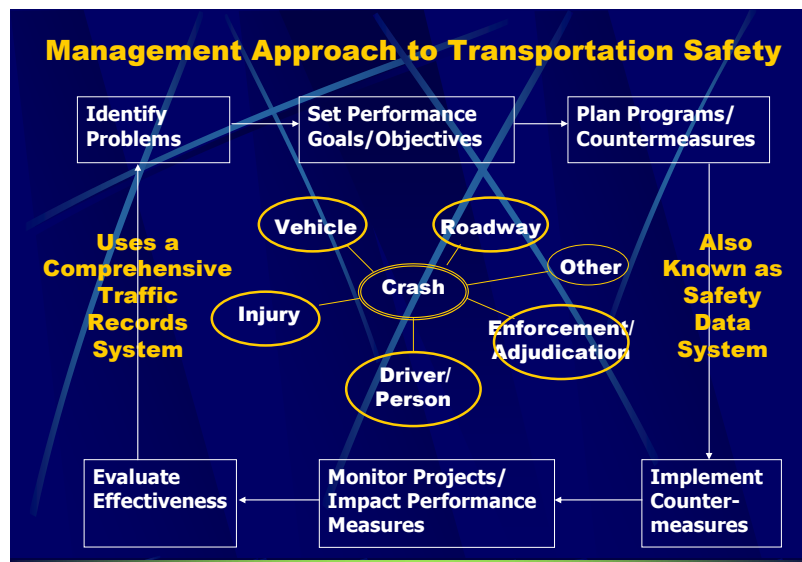
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## Introduction

A traffic records data system is critical for stakeholders to be able to identify priorities for State and local highway safety programs, evaluate the effectiveness of improvements being made, promote information sharing, and monitor trends, incident reports, persons injured or killed, property damage, rates and other outcomes or impacts.

Analyses of data from a traffic records system data base are used to identify and strategically target limited resources to traffic safety problems and provide for safer and more efficient roadways in the State. A management approach to transportation safety requires a comprehensive traffic records system.



The traffic records strategic plan is an active document updated annually to reflect new issues and the changing environment within highway safety and traffic safety data systems. Information contained in this document, together with findings and recommendations from the 2007 Traffic Records Assessment, constitute the content revision for the 2009 Section 408 Application Strategic Plan. Included in this plan are the deficiencies in the State's traffic records system together with information concerning how additional funding could be used to address identified deficiencies.

For the past few years, the work of the State Traffic Records Coordinating Committee (TRCC) has focused on the development of electronic field data capture of motor vehicle crash, citation, EMS, patient care, and other incident reporting, including the back-end systems to receive and process this data. A primary objective of the TRCC has been a state crash data repository as outlined and discussed in the 2007 Traffic Records Assessment. The TRCC has also continued to emphasize the development and implementation of data transmittal protocols that allow for the upload of data to the appropriate State and local databases. While the TRCC was close to securing a sponsoring agency this year to serve as the lead for a crash data repository, time constraints prevented this from occurring.

The TRCC continues to strive for increased support for law enforcement participating in the electronic field data capture of traffic citation information, which addresses one of the core system components of a traffic records system – Citation/Adjudication. From a performance area perspective, anticipated benefits from electronic or e-citation reporting include the completeness, accuracy and timeliness of citation data captured in the field.

Expected impacts from e-citation reporting include:

- Expanded management information and targeted enforcement activities in equipped municipalities;
- Improved timeliness / availability of citation data to the courts; and
- Improved accuracy and completeness of collected and submitted citation data.

To complement the continuation/completion of the development of the back-end process for the electronic capture of citation data by law enforcement, the TRCC proposes in the 4<sup>th</sup> year application for Section 408 funding, the increased support for local law enforcement for an additional two hundred fifty to three hundred e-citation equipped law enforcement vehicles.

The need for a state crash data repository remains to provide a complete system for data storage, access, and analysis of motor vehicle traffic crash data for all involved stakeholders. Improving motor vehicle traffic crash data will ultimately help in making better programming decisions, i.e., transportation planning, public health, highway safety, driver licensing, engineering and law enforcement deployment.

The State has been fortunate in the establishment of an electronic emergency medical services Patient Care Report (PCR) data collection system, initiated in January 2007. In June 2008, the Department of Public Health (DPH)/Office of Emergency Medical Services (OEMS) completed the development of the State repository server and began to receive PCR data electronically from local EMS providers. All EMS providers who received 408 funding for the purchase of laptop computers were required to initiate electronic submission of PCR data to OEMS no later than January 1, 2009.

Transportation safety data systems provide information, which is critical to the development of policies and programs that maintain the safety and the operation of the nation's roadway transportation network.

<sup>1</sup>Motor vehicle traffic crash reporting that is timely, complete and accurate provides valuable data to many different groups of people.

## Safety Data Project Funding

### 2006 – 2007 Projects

The seven projects listed, and the amount of funding requested for each, were proposed for the 2006 Section 408 application.

• EMS PCR (Patient Care Reporting Data Collection System)	\$250,000
• Captain Electronic PR-1 and Citation Local Law Enforcement Pilots	250,000
• NexGen Electronic PR-1 CSP to DOT Transfer	300,000
• NexGen Electronic PR-1 Local Law Enforcement Pilots	250,000
• EMS PR-1 Data Analysis Project	60,000
• Crash Data Clearinghouse	100,000
• Safety Data Project Manager	100,000
Total 408 funding requested	\$1,310,000

The State was awarded \$380,000 in 408 funds for year 2006. The four projects listed, and the funding sources for each, were proposed and agreed to by the Connecticut TRCC.

• EMS PCR (Patient Care Reporting Data Collection System) (408)	\$190,000
• CAPTAIN Electronic PR-1 and Citation Local Law Enforcement Pilots (408)	190,000
• NexGen Electronic PR-1 CSP to DOT Transfer (406)	150,000
• NexGen Electronic PR-1 Local Law Enforcement Pilots (406)	150,000
• EMS PR-1 Data Analysis Project (discussed/no funding provided)	
• Crash Data Clearinghouse (discussed/no funding provided)	

• Safety Data Project Manager (discussed/no funding provided)	
Total 408 monies for traffic records improvements	380,000
Total 406 monies for traffic records improvements	300,000

### 2007 – 2008 Projects

The five projects listed, and the amount of funding requested for each, were proposed for the 2007 Section 408 application.

• EMS PCR (Patient Care Reporting Data Collection System)	\$310,000
• CAPTAIN Electronic PR-1 and Citation Local Law Enforcement Pilots	100,000
• NexGen Electronic PR-1 CSP to DOT Transfer	125,000
• NexGen Electronic PR-1 Local Law Enforcement Pilots	100,000
• Electronic Citation Processing System	75,000
• State Crash/Traffic Records Data Clearinghouse (no funding requested)	0
Total 408 funding requested	\$710,000

The State was awarded \$500,000 in 408 funds for year 2007. The five projects listed were proposed and agreed to by the Connecticut TRCC.

• EMS PCR (Patient Care Reporting Data Collection System) (408)	\$310,000
• CAPTAIN Electronic PR-1 and Citation Local Law Enforcement Pilots (408)	100,000
• NexGen Electronic PR-1 CSP to DOT Transfer* (406)	150,000
• NexGen Electronic PR-1 Local Law Enforcement Pilots (406/408)	100,000
• Electronic Citation Processing System (408)	75,000
• State Crash/Traffic Records Data Clearinghouse (no funding provided)	
Total 408 monies for traffic records improvements	500,000
Total 406 monies for traffic records improvements	235,000

\*The NexGen Electronic PR-1 CSP to DOT Transfer was increased from 125,000 to 150,000.

### 2008 – 2009 Projects

The four projects listed, and the amount of funding requested for each, were proposed for the 2008 Section 408 application.

• EMS PCR (Patient Care Reporting Data Collection System)	\$310,000
• CAPTAIN Electronic PR-1 and Citation Local Law Enforcement Pilots	120,000
• NexGen Electronic PR-1 CSP to DOT Transfer	150,000
• Electronic Citation Processing System	75,000
Total 408 funding requested	\$655,000

The State was awarded \$500,000 in 408 funds for year 2008. In October 2008, the following six projects with funding sources were agreed to by the TRCC.

• EMS PCR (Patient Care Reporting Data Collection System) (408)	\$310,000
• CAPTAIN Electronic PR-1 and Citation Local Law Enforcement Pilots (408)*	95,000
• NexGen Electronic PR-1 CSP to DOT Transfer (406)	150,000
• NexGen Electronic PR-1 Local Law Enforcement Pilot (406)	100,000
• Electronic Citation Processing System (408)**	70,000
• CSP to CIB E-Citation Data (408)	25,000

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Total 408 monies for traffic records improvements	500,000
Total 406 monies for traffic records improvements	250,000

\*Offer by CAPTAIN (25,000) to CSP for pilot test of E-Citation.

\*\* Adjustment made @ 408 cap – 5,000

### 2009 – 2010 Projects

The five projects listed, and the amount of funding requested for each, are proposed for the 2009 Section 408 application.

• Electronic Citation Processing System	\$75,000
• Electronic Payment Processing System	25,000
• Emergency Medical Services Patient Care Reporting Data Collection System	100,000
• E-Crash Reporting to DOT/GPS-GIS/Crash-Roadway-ADT File Integration	150,000
• E-Citation Pilots for Local Law Enforcement	300,000
Total 408 funding requested	\$650,000

As a result of discussions by stakeholders during the May 13, 2009 meeting of the TRCC, continued discussions and review of the draft project proposals and Strategic Plan in late May to early June 2009, and the meeting of the TRCC on June 10, 2009, it is the consensus of the TRCC that the above projects with requested funding be proposed for the 4<sup>th</sup> year application, 2009 – 2010 Section 408 safety data improvements.

## Program Level Information

**State Transportation Safety Data System Contact:** Point of contact for questions related to the Strategic Plan or other traffic records-related issues

Name: Joseph T. Cristalli, Jr.  
Title: Transportation Principal Safety Program Coordinator  
Agency: Connecticut Department of Transportation  
Office: Transportation Safety Section  
Address: 2800 Berlin Turnpike  
City, ZIP: Newington, CT 06131  
Phone: 860-594-2412  
Email: joseph.cristalli@po.state.ct.us

**Traffic Records Coordinating Committee (TRCC):** This year the TRCC tracked its progress and managed safety project development by posting documents on its website, which was used to monitor and update the strategic plan, track ongoing projects, post meeting updates and include presentations from TRCC meetings as well as other workshops and sources of information, including the NHTSA website of over 800 safety data projects implemented nationwide in the first three years of the Section 408 program. The TRCC website is located at [www.ct.gov/dot](http://www.ct.gov/dot), under Programs and Services, then Transportation Safety Programs.



**Authority** – The Connecticut TRCC continues to operate under the authority of and by the appointment of the Administrators of the Connecticut Department of Transportation, Connecticut Department of Motor Vehicles, Connecticut Department of Public Health, and the Judicial Branch who represent the core safety data systems: Motor Vehicle Crash, Roadway, Driver License/History, Vehicle Registration, Injury Surveillance/EMS, and Citation/Adjudication.

Letters of delegation (Administrators listed below) are attached to the Section 408 application.

Letters of delegation from these Administrators designate individual(s) to attend and participate on the TRCC, as their representatives.

Crash Data <sup>2</sup>System:

Name: Joseph F. Marie  
Title: Commissioner  
Agency: Department of Transportation

Driver License / History Data System:

Name: Robert M. Ward  
Title: Commissioner  
Agency: Department of Motor Vehicles

Injury Surveillance / EMS Data System:

Name: J. Robert Galvin  
Title: Commissioner  
Agency: Department of Public Health

Citation / Adjudication Data System:

Name: Joseph D. D'Alesio  
Title: Executive Director of Operations  
Agency: Superior Court

Vehicle Registration Data System:

Name: Robert M. Ward  
Title: Commissioner  
Agency: Department of Motor Vehicles

Roadway Data System:

Name: Joseph F. Marie  
Title: Commissioner  
Agency: Department of Transportation

**TRCC (Technical Level)** – The Connecticut TRCC, supported by the Transportation Safety Section, continues an active, full schedule. In its efforts to seek improvements in the State's traffic records system, as outlined in this Strategic Plan and reflected in the 2007 Traffic Records Assessment, the TRCC's emphasis has followed the original recommendations from the Section 408 process for measures of improvements – *completeness, uniformity, timeliness, accuracy, integration and accessibility* of the data by stakeholders.

The following vision and mission statements, reviewed during TRCC meetings in 2008 and 2009, continue to support the goals and objectives of the TRCC.

### TRCC Vision

A comprehensive Traffic Records System that provides reliable Data critical to the development of policies, and programs that enhance the operation and safety of the Connecticut Highway Transportation (National, State, and Local Roads) System.

### TRCC Mission

Develop and promote a comprehensive Traffic Records System that provides Timely, Accurate, Complete, Uniform, Integrated, and Accessible Traffic Records System data for management of Highway and Traffic Safety Programs.

The Connecticut TRCC shall:

- a. Include representatives from highway safety, the highway infrastructure, law enforcement, adjudication, public health, injury control and other State and federal agencies and organizations;
- b. Have authority to review the State's highway safety data and traffic records system and review changes to such systems before the changes are implemented;
- c. Provide a forum for the discussion of highway safety data and traffic records system issues and report on such discussions to the agencies and organizations in the State that manage and use highway safety and traffic records system data;
- d. Consider and coordinate views of organizations in the State that are involved in the collection, management and use of traffic records system data;
- e. Represent the interests of traffic records system agencies and organizations to outside organizations; and
- f. Review and evaluate new technologies that have potential application for improving the Timeliness, Accuracy, Completeness, Uniformity and Accessibility of Traffic Records System data.

Participants on the TRCC (2009 roster attached), which meets bi-monthly, include six new stakeholders<sup>3</sup> added this past year, while four members left due to changing job assignments. One member took a one-year leave from the committee for research purposes in Sweden.

**Crash Data Systems – MMUCC Audit:** The Federal Register requests that States document the<sup>4</sup>MMUCC Guideline data elements that they collect and use within their crash data system.

The State TRCC continues its focus on safety data improvement projects that allow measurement of change/impact in the short term. As noted in the 2007 408 application, emphasis was placed on activities like the<sup>5</sup>CVARS project that provided for electronic capture and submittal of commercial vehicle crash data. The TRCC also continues to focus on increasing the number of MMUCC data elements that are included in the<sup>6</sup>core of a State crash data repository. Noted in previous 408 applications, the PR-1 contains 48 of the 77 MMUCC data elements, but only<sup>7</sup>23 are included on the ConnDOT crash data file. With electronic crash data capture and submittal, the number of MMUCC data elements included in a State crash data repository would provide for all 48 of the collected MMUCC data elements. A Detailed PR-1 MMUCC<sup>8</sup>comparison (available upon request) was provided in the 2007 Section 408 submission.

**EMS Data Systems – NEMSIS Audit:** The Federal Register requires that States document the NEMSIS data elements that they collect and use within their EMS data system.

For the 2006 Section 408 Application, the Office of Emergency Medical Services documented in a letter to the ConnDOT Transportation Safety Section that the existing State paper EMS run report contained a third of the recommended Silver NEMSIS data elements.

The use of NEMSIS was mandated beginning January 2007 and all EMS services provided Toughbook laptop computers are required to have <sup>9</sup>Gold Standard NEMSIS compliant software and be trained in the use of this software. It should be noted, however, that the number of NEMSIS data elements captured in a Patient Care Report (PCR) depends upon the seriousness of the call for service. Beginning in June 2008, PCR data collected electronically was submitted to a server located in the Office of Emergency Medical Services. Emphasis in 2009 continues to assure that all PCR data that are collected electronically are Gold NEMSIS compliant. A memo was issued to all vendors and EMS providers requesting that 400+ NEMSIS required data elements be submitted as dictated by the specifics in each case, beginning no later than July 1, 2009.

Memos concerning the use of the NEMSIS Standard and the comparison of the MMUCC Guideline to the PR-1 are attached.

**Traffic Records Assessment:** Legislation requires that States have performed a Traffic Records Assessment within the past five years for all grant applications after the first year.

The ConnDOT Transportation Safety Section and the TRCC completed a NHTSA approved Traffic Records Assessment in March 2007. A copy of the Traffic Records Assessment is included.

As provided in the Traffic Records Assessment, for members of the TRCC to determine if progress is being made in achieving the performance measures stated in the Strategic Plan, it is necessary for the TRCC to periodically assess the current traffic records system environment and review the progress of current initiatives. This serves to assist the State and the TRCC in developing a traffic records system that meets the requirements of the traffic safety community. The March 2007 Traffic Records Assessment provided the following:

- a. During its meeting on 3-20-07, the TRCC reviewed a handout, which compared the top 20 recommendations from the 2007 Assessment with the 14 major program areas from the 2006 Strategic Plan. The Assessment confirmed the emphases being pursued by the TRCC in its Strategic Plan.
- b. Major recommendations from the Assessment emphasized the following traffic records core systems components:
  - Motor Vehicle Crash (5)
  - Driver License/History (2)
  - Vehicle Registration (1)
  - Injury Surveillance/EMS (3)
  - Citation/Adjudication (1)
  - Roadway/Location (3)
- c. Other major recommendations from the Assessment related to:
  - Traffic Records Coordinating Committee (3)
  - Traffic Records Strategic Plan (2)

There was no substantive change in emphases by the TRCC as a result of the 2007 Assessment recommendations.

**Crash Data Repository** - The following references to a pdf document of the 2007 Traffic Records Assessment, contained on the TRCC website, highlight a dozen recommendations within the following sections of the Assessment, emphasizing the need for a Crash Data Repository.

2007 Traffic Records Assessment – Executive Summary, Major Recommendations, Traffic Records System Components, Information Quality, and Uses of a Traffic Records System.

**2007 Traffic Records Assessment** – Contained on the TRCC website ([www.ct.gov/dot](http://www.ct.gov/dot)) - under Programs and Services, Transportation Safety Programs), this pdf document of the 2007 Assessment includes a “bookmarked table of contents” for the Assessment.

Sections **highlighted below in red** illustrate the number of references with recommendations pertaining to the need for a Crash Data Repository for the State.

### Table of Contents (bookmarked - pdf)

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The TRCC continues to assure the inclusion of all traffic records system data collectors, managers and users. It also emphasizes that the purpose of traffic records system data is to assist in identifying traffic safety problems, developing effective countermeasures to address identified problems and evaluating implemented countermeasures. As previously stated, while this year's pursuit of a crash data repository was unsuccessful, the TRCC will continue to pursue this goal for the State, as an essential component of a traffic records system, as outlined in the 2007 Assessment.

## Deficiencies

Legislation requires that states list their system deficiencies and how those deficiencies were determined. As noted in the March 2007 Traffic Records Assessment, existing deficiencies in the current traffic records system had been identified in a 2004 Assessment, and became the basis for the 2006 Section 408 Application. Deficiencies identified focused on the six measures of data quality (timeliness, uniformity, completeness, accuracy, accessibility and integration). The 2007 Assessment corroborated the findings of the 2004 Assessment.

**Deficiency Description:** This section contains brief descriptions of system deficiencies. The following represents brief statements of traffic records system deficiencies, previously identified, in addition to new information included from the 2007 Assessment. Deficiencies are described according to their respective traffic records system core areas with reference to a specific performance area (timeliness, uniformity, completeness, accuracy, accessibility, and integration) that is to be addressed by improving the system deficiency.

Note: In 2006, the NHTSA review team categorized and documented on its web site (43) deficiencies for Connecticut's traffic records system from the information provided in the 2006 Section 408 Application. The deficiency ID numbers introduced by the NHTSA Team have been maintained for their reference and update; however the deficiencies have been reordered by Core System Area and by priority of safety data improvement projects. Notations have also been made in instances where identified deficiencies were duplicated, such as #3 and #7, which represent the same deficiency. In addition, (14) new deficiencies were added (#44 - #57).

### Deficiency by Core System Area

#### Injury Surveillance – EMS Run Reporting System

Deficiency ID				
CT-D-00050				
Performance Area	System	Basic Description	Status	Last Update
Completeness/ Timeliness/ Uniformity	Injury Surveillance/ EMS	Specific focus	July 1, 2008 OEMS began electronic receipt of electronic EMS PCR data	6-15-09
Deficiency Description				
Lack of electronic capture of EMS run data. Focus of lead project for three years of Section 408 Applications.				

#### Crash System

Deficiency ID				
CT-D-00011				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	Specific focus	Electronic reporting key	6-15-09
Deficiency Description				
Local road PDO reports were previously not entered into the ConnDOT accident file. This is addressed in three out of the four main projects submitted through three years of Section 408				

applications. Local PDO crash data for 2007 and 2008 (partial) have now been entered into the ConnDOT Accident file. Entry of local road PDO crashes will continue for the remainder of 2008 as well as 2009 crashes.

Deficiency ID				
CT-D-00041				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	Specific focus	Electronic reporting key	6-15-09
Deficiency Description				
Crash data lacking for Local roads, PDO crashes and all crashes. Relates to CT-D-00011.				

Deficiency ID				
CT-D-00012				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	Specific focus	Electronic reporting key	6-15-09
Deficiency Description				
Two-thirds of the data from all reportable crashes not entered into the ConnDOT accident file. This is addressed in three out of the four main projects submitted through three years of Section 408 applications. Development of the XML schema for receipt of PR-1 data from CSP to ConnDOT as well as resolution of NexGen edit software rules have been accomplished.				

Deficiency ID				
CT-D-00015				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Crash	Specific focus	Electronic reporting key	6-15-09
Deficiency Description				
Delays in obtaining the crash data. This is addressed in three out of the four main projects submitted through three years of Section 408 applications. Development of the XML schema for receipt of PR-1 data from CSP to ConnDOT as well as resolution of NexGen edit software rules have been accomplished.				

Deficiency ID				
CT-D-00016				
Performance Area	System	Basic Description	Status	Last Update
Integration	Crash	Specific focus	Crash data repository key	6-15-09
Deficiency Description				
Legacy crash data system can't accommodate electronic transmission of crash reports. Creation of a crash data repository is the first step in managing the crash data integration deficiency.				

Deficiency ID				
CT-D-00017				
Performance Area	System	Basic Description	Status	Last Update
Integration	Crash	Specific focus	Crash data repository key	6-15-09
Deficiency Description				
Legacy crash data system can't support other new input/output capabilities. Refer to description for CT-D-00016.				

Deficiency ID				
CT-D-00018				
Performance Area	System	Basic Description	Status	Last Update
Accessibility	Crash	Specific focus	Crash data repository key	6-15-09
Deficiency Description				
Legacy crash data system has poor user access. Refer to description for CT-D-00016.				

Deficiency ID				
CT-D-00019				
Performance Area	System	Basic Description	Status	Last Update
Integration	Crash	Specific focus	Crash data repository key	6-15-09
Deficiency Description				
Legacy crash data system has no capabilities to link to other systems. Refer to description for CT-D-00016.				

Deficiency ID				
CT-D-00020				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash/Vehicle	Specific focus	Electronic reporting key	6-15-09
Deficiency Description				
Reporting of CMV crashes was incomplete and inconsistent. Through funding from the Commercial Vehicle Analysis Reporting System (CVARS) project of FMCSA, as of late 2006, the State was able to begin the collection, processing and review of electronic reporting of crashes involving commercial motor vehicles (CMV), with direct upload to the Federal SafetyNet System.				

Deficiency ID				
CT-D-00035				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Crash/Vehicle	Specific	CVARS	6-15-09
Deficiency Description				
The capture and upload of CMV crash data for SafetyNet is now automated.				

Deficiency ID				
CT-D-00036				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Crash	Specific	FARS	6-15-09
Deficiency Description				
FARS-information regarding alcohol or drugs (crash related) can be delayed. Important initiative, continually stressed by NHTSA. TRCC is very supportive of the FARS Office in focusing on this important issue.				

Deficiency ID				
CT-D-00037				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Crash	Specific	FARS	6-15-09
Deficiency Description				
Submission of FARS data can be delayed if there are extenuating circumstances such as delays in obtaining BAC data. NHTSA continues to stress this initiative, and the TRCC is very supportive of the Connecticut FARS office in addressing this important issue.				

Deficiency ID				
CT-D-00001				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Incomplete reports – this is a general description. It is not targeted specifically in any of the ongoing safety data projects; however, through electronic roadside data capture (with built in edit and validity checks) this deficiency is being addressed.				

Deficiency ID				
CT-D-00002				
Performance Area	System	Basic Description	Status	Last Update
Accessibility	Crash	General	Crash data repository key	6-15-09
Deficiency Description				
Data does not meet the requirement of most traffic safety data users.				

Deficiency ID				
CT-D-00003				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Crash/Roadway	Specific focus	Electronic reporting with GPS key	6-15-09

Deficiency Description
Location data is not consistently reported. The crash location is usually determined by reference to the narrative, and if included, GPS coordinates provided on the PR-1 by the investigating officer. This deficiency also relates to the Roadway Core System. Future State efforts to establish/implement a GIS base map that can be integrated with electronic reporting is also an important initiative in addressing this deficiency. This information is repeated as CT-D-00007.

Deficiency ID				
CT-D-00004				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Alcohol, contributing circumstances, other data often not recorded.				

Deficiency ID				
CT-D-00005				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Crash	Specific focus	PR-1 MMUCC work group key	6-15-09
Deficiency Description				
Data not compatible/comparable with other states. Future effort by PR-1 MMUCC work group could lead to greater uniformity with other states crash data.				

Deficiency ID				
CT-D-00006				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Crash/Roadway	Specific	Electronic reporting with GPS key	6-15-09
Deficiency Description				
Identifying crash location on a State reference map from field information is time consuming. Future State efforts to establish/implement GIS base map that can be integrated with electronic reporting is critical.				

Deficiency ID				
CT-D-00007				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Crash/Roadway	Specific focus	Electronic reporting with GPS key	6-15-09
Deficiency Description				
Location data is inconsistent. This is a repeat of CT-D-00003.				

Deficiency ID				
CT-D-00008				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Handwritten reports are sometimes difficult to read.				

Deficiency ID				
CT-D-00009				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Copy errors.				

Deficiency ID				
CT-D-00010				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Incomplete reports. This is a repeat of CT-D-00001.				

Deficiency ID				
CT-D-00013				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Crash	General	Crash data repository key	6-15-09
Deficiency Description				
Duplication of data entry at State and Local levels.				

Deficiency ID				
CT-D-00014				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Crash	General	Electronic reporting key	6-15-09
Deficiency Description				
Transposition errors made in preparing the finished report.				

Deficiency ID				
CT-D-00021				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Crash/Citation/Adjudication	General	Electronic reporting key	6-15-09
Deficiency Description				
Officers tend not to indicate contributing circumstances or other factors if driver is not cited. Relates to CT-D-00004.				

Deficiency ID				
CT-D-00044				
Performance Area	System	Basic Description	Status	Last Update
All areas	Crash	General	Training/feedback key	6-15-09
Deficiency Description				
Feeling by law enforcement that crash reporting is only for insurance and court use.				

Deficiency ID				
CT-D-00045				
Performance Area	System	Basic Description	Status	Last Update
Accuracy/Uniformity	Crash	General	Training/feedback key	6-15-09
Deficiency Description				
Confusion at times by law enforcement concerning classification of motor vehicle crashes.				

Deficiency ID				
CT-D-00046				
Performance Area	System	Basic Description	Status	Last Update
All areas	Crash	General	Training/feedback key	6-15-09
Deficiency Description				
Lack of feedback to law enforcement as to the value of and how data is used for highway traffic safety planning.				

Deficiency ID				
CT-D-00047				
Performance Area	System	Basic Description	Status	Last Update
All areas	Crash/Citation/Adjudication	General	Training/feedback key	6-15-09
Deficiency Description				
Feeling by law enforcement that they are forced to become data entry operators.				

**Citation/Adjudication System**

Deficiency ID				
CT-D-00026				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Too much radio time between dispatch and officer in the field conducting an enforcement stop. Impacts from an electronic citation processing system and Impaired Driver Records Information System (CIDRIS) will begin to have measurable impacts in 2010 - 2011.				

Deficiency ID				
CT-D-00027				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Quality of driver, vehicle, citation, other data lacking. Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00032				
Performance Area	System	Basic Description	Status	Last Update
Accessibility	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Lack of real time access to critical data "24-7". Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00033				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Lack of standards to permit better sharing of justice information. Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00034				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Delays in obtaining data. Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00054				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Issuance of paper-based citation for impaired drivers. Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00055				
Performance Area	System	Basic Description	Status	Last Update
Integration	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Duplication in data entry of reports for impaired drivers. Measurable impacts expected in 2010 - 2011.				

Deficiency ID				
CT-D-00056				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Citation/Adjudication	General	e-Citation/CIDRIS	6-15-09
Deficiency Description				
Handwritten reports sometimes difficult to read; copying errors; incomplete reports. Measurable impacts expected in 2010 - 2011.				

### Driver License/History System

Deficiency ID				
CT-D-00022				
Performance Area	System	Basic Description	Status	Last Update
Integration	Driver License/History	General	CTDMV Enterprise Modernization Proj. key	6-15-09
Deficiency Description				
Lack of a customer account number to tie related driver and vehicle information together. DMV is addressing this with a major system re-design.				

Deficiency ID				
CT-D-00023				
Performance Area	System	Basic Description	Status	Last Update
Integration	Driver License/History	General	CTDMV Enterprise Modernization Project key	6-15-09

Deficiency Description				
DMV files are more stand-alone, not linked files. DMV is addressing this in a new system re-design.				

Deficiency ID				
CT-D-00024				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Driver License/ History	General	Electronic field reporting with link to DMV Driver files	6-15-09
Deficiency Description				
Data on DL, such as driver address can be outdated.				

Deficiency ID				
CT-D-00025				
Performance Area	System	Basic Description	Status	Last Update
Timeliness	Driver License/ History	General	CTDMV Enterprise Modernization Project key	6-15-09
Deficiency Description				
Some processed DMV data not timely. DMV is addressing this in a new system re-design.				

Deficiency ID				
CT-D-00048				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Driver License/ History	General	CTDMV Enterprise Modernization Project key	6-15-09
Deficiency Description				
Lack of DL data on drivers with serious driving offenses from previous state of record.				

Deficiency ID				
CT-D-00049				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Driver License/ History	General	CTDMV Enterprise Modernization Project key	6-15-09
Deficiency Description				
Lack of driver crash data for driver control and improvement.				

Deficiency ID				
CT-D-00057				
Performance Area	System	Basic Description	Status	Last Update
Integration	Driver License/ History	General	CTDMV Enterprise Modernization Project key	6-15-09
Deficiency Description				
Lack of features incorporated into a real-time system, such as - NMVTIS, an electronic lien system, and integration with the driver system.				

### Roadway System

Deficiency ID				
CT-D-00028				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Roadway	General	Base map key	6-15-09
Deficiency Description				
State lacks a standardized location reference system. State efforts initiated to establish/implement GIS base map that can be integrated with electronic field reporting, providing latitude and longitude coordinates. Another State initiative is developing a linear referencing system that will link to other roadway systems.				

Deficiency ID				
CT-D-00029				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Roadway	General	Roadway inventory system	6-15-09
Deficiency Description				
Roadway inventory data not standardized or automated for gathering, analysis and dissemination. State initiative to develop a roadway inventory system containing roadway characteristics data has been implemented.				

Deficiency ID				
CT-D-00030				
Performance Area	System	Basic Description	Status	Last Update
Completeness	Roadway	General	Local data key	6-15-09
Deficiency Description				
Roadway inventory for local roadways is deficient compared to the inventory of the State's system. Possible future application for new FHWA MMIRE Guideline – Model Minimum Inventory of Roadway Elements.				

Deficiency ID				
CT-D-00031				
Performance Area	System	Basic Description	Status	Last Update
Accuracy	Roadway/Crash	General	Crash data repository key	6-15-09
Deficiency Description				
The State safety improvement programs are linked to upgrading the extant, outdated legacy reporting system.				

### Injury Surveillance/EMS System

Deficiency ID				
CT-D-00038				
Performance Area	System	Basic Description	Status	Last Update
All areas	Injury Surveillance/ EMS	General	Priority improvements	6-15-09
Deficiency Description				
There have been limited resources in the past for injury surveillance and data analysis including a lack of human resources. The State has implemented initiatives for developing and completing an Injury Surveillance System, an EMS Patient Care Report as well as provision of data for the Crash Outcome Data Evaluation System (CODES).				

Deficiency ID				
CT-D-00039				
Performance Area	System	Basic Description	Status	Last Update
All areas	Injury Surveillance/ EMS	General	Improvements in other areas key	6-15-09
Deficiency Description				
Dependency on crash, location identification and other traffic record system data require significant improvements. Many other related system improvements are described in the 2006 Strategic Plan.				

Deficiency ID				
CT-D-00051				
Performance Area	System	Basic Description	Status	Last Update
Integration	Injury Surveillance/ EMS	General	High priority focus of Department of Health	6-15-09
Deficiency Description				
A statewide electronic centralized Trauma Registry has been implemented – two years of data for 2005, 2006.				

Deficiency ID				
CT-D-00052				
Performance Area	System	Basic Description	Status	Last Update
Uniformity	Injury Surveillance/ EMS	General	NEMSIS data element standard providing momentum	6-15-09
Deficiency Description				
The Patient Name/SSN exists in all databases to track a patient/victim from the scene of a crash through the healthcare system. Availability of these data allows for the use deterministic linkage between databases. CODES System linkage/data analysis is an excellent tool for promoting patient tracking systems development.				

Deficiency ID				
CT-D-00053				
Performance Area	System	Basic Description	Status	Last Update
Accessibility	Injury Surveillance/ EMS	General	CODES Advisory Board in place	6-15-09
Deficiency Description				
Lack of access to comprehensive medical and healthcare data files by authorized data partners.				

### All Core Component Areas - TRCC

Deficiency ID				
CT-D-00040				
Performance Area	System	Basic Description	Status	Last Update
All areas	All systems	General	Focus of 408 Program	6-15-09
Deficiency Description				
TRCC – Traffic Records System agencies have made progress in the appreciation of other agencies' roles and responsibilities. Some stovepipe planning continues to exist, impacting the coordination of funding decisions on agency system improvements. TSS is fully committed to support of the TRCC, but does not have a full-time traffic records coordinator. Funding for a full-time traffic records coordinator is strongly supported by NHTSA under the Section 408 grant program.				

Deficiency ID				
CT-D-00042				
Performance Area	System	Basic Description	Status	Last Update
All areas	All systems	General	Documented in 2006 Strategic Plan	6-15-09
Deficiency Description				
The State lacks a Problem ID manual with training. As addressed in the Strategic Plan, State could adopt a "best-practices" approach from another state(s).				

Deficiency ID				
CT-D-00043				
Performance Area	System	Basic Description	Status	Last Update
Accessibility	All systems	General	2006 Strategic Plan	6-15-09
Deficiency Description				
The State lacks data access, data analysis tools and appropriate training for authorized users. A user-friendly tool, such as the <sup>10</sup> CARE system could be considered.				

## Safety Data Projects

**Project Prioritization:** (Legislation requires that States document how they prioritized projects).

For the 2006 Section 408 Application, projects were selected and prioritized using a combination of factors. Part 1 of the 2006 Application – Deficiency Analysis and Major Strategies, page 2 – used the criteria defined below. The following program areas were listed based on a ranking of priorities by a two-thirds representation of the TRCC. For detail of each of these program areas, refer to the 2006 Strategic Plan.

1. Crash Data Content – Increased focus on specific data element fields with electronic reporting
2. Location Reference System – ConnDOT focus/FHWA support
3. Crash E-Data Capture – Led to State and local safety data projects
4. Crash Data Clearinghouse – Being proposed as a 4<sup>th</sup> year 408 project
5. Crash Report Training – Previous effort by the CSP for CVARS. Will need reassessment, given electronic reporting to insure consistent reporting among State and local law enforcement
6. Driver/Vehicle – Modernization contract replacing Re-ROD and RTOL
7. Citation/Adjudication – CIDRIS (Integration efforts underway between DMV, DCJ, DPS, Judicial)
8. TRCC – Leadership, Financial Assistance, Executive Level Oversight
9. Roadway – Road Inventory (State and local road); GIS Base Map development
10. CVARS – Underway; State and local law enforcement involved
11. FARS – Model system; need for continual emphasis in complete and timely reporting
12. ISS/EMS – Efforts underway/CDC support; EMS run report safety data project operating
13. Data Analysis – TSS uses outside support for highway safety planning; DOT in-house tools to analyze locations

These program areas were reviewed in comparison to the major recommendations of the 2007 Traffic Records Assessment during the March 2007 meeting of the TRCC, and as previously stated, there did not appear to be any substantive change to the emphases currently being pursued by the TRCC.

Identified in the 2006 Strategic Plan and discussed during the February 2007 NHTSA planning workshop in Saratoga Springs, a challenge for the State has continued to be the lack of a State crash data repository to be able to accommodate/accept the electronic transmission of PR-1 crash reports from law enforcement agencies statewide. Rated high in the Strategic Plan, the planning for a crash data repository received less attention during the 2006 Section 408 Application, after the state was advised to submit projects that could show quick results. This year the TRCC again focused on a crash data repository, but was unsuccessful, as mentioned earlier.

Previously, the focus of the TRCC on safety data improvement projects that would show change/impact in the short term directed it to consider/benefit from the success of CVARS and to implement projects that included electronic crash data collection. The decision was also made to learn from the success of electronic collection of EMS Patient Care Report (PCR) data, already underway.

In 2006, the NHTSA review team cataloged seven projects from the information provided in the 2006 Section 408 Application. The project ID numbers have been maintained for reference and update by the NHTSA Team.

Note: Though there were seven proposed projects in 2006, project numbers include the number CT-P-00008 because project # CT-P-00005 was assigned by the NHTSA Team to an unknown project. The basis for this assignment was never made clear. Projects considered for the 2008 application begin with CT-P-00009. The same project reference numbering is being used for the 2009 application.

**Safety Data Project Selection**

In making project selections for the 2009 408 submission, input from TRCC stakeholders was obtained during TRCC meetings in January, March, May and June, e-mails and follow-up phone calls focusing on the TRCC website, the emerging Strategic Plan and the importance of reaching consensus for the fourth year of the Section 408 funding. Other factors included the 2008 Section 408 funding application, recommendations from the 2007 Traffic Records Assessment, and best practices applications from other state projects thanks to NHTSA's searchable website of over 800 projects nationwide through the first three years of Section 408 applications.

The five projects proposed for the 2009 Section 408 application, presented earlier in the section on Project Funding, page 4, emerged with equal priority with the exception of the recommended funding. From the involvement and influence of representatives from the law enforcement and judicial communities, electronic roadside data capture of citation information together with motor vehicle crash information has risen in priority as improvement objectives the TRCC seeks to achieve.

Projects being proposed for funding in the 2009 application include, \*Electronic Citation Processing System, \*Electronic Payment Processing System, \*E-Citation Pilots for Local Law Enforcement, \*Emergency Medical Services Patient Care Report Data Collection System, and \*E-Crash Reporting to DOT/GPS-GIS/ Crash-Roadway-ADT File Integration.

## Performance Measures and Goals

In listing performance measures, the same reference numbers that were documented by the NHTSA review team for the 2006 Section 408 application for Connecticut have been included for referencing and update purposes. Some of the measures are duplications (such as 03 and 04). Additional performance measures (18-22) have been included that were proposed for the first year Section 408 funding, but were not recorded.

Performance Measures by  
Performance Area vs. Safety Data Core System

	Crash	Citation/ Adjudication	Driver	Vehicle	Roadway	Injury Control/EMS
Completeness	01, 16, 22					18
Uniformity	08, 21,					19
Timeliness	07	02, 09, 10, 11				
Integration		03, 04, 12, 13, 14				
Accessibility		05				
Accuracy						

The (17) performance measures documented by the NHTSA team from Connecticut's 2006 Section 408 application are presented using the NHTSA assigned reference numbers. They have been re-ordered, however, to reflect the priority records system improvement efforts pursued by the TRCC beginning with the Injury Control/EMS Core System area.

Measures that relate to Citation/Adjudication are listed together following the Crash and EMS emphasis areas. Measures #11 (Citation/Adjudication and Driver), #20 (Crash and Vehicle), and #6 (Crash and Roadway) represent initiatives that relate to more than one core system area.

Injury Surveillance/EMS – Completeness			
Measure ID: CT-M-00018			
Status	Performance Area	System	Direction
1-1-07 Provision of Toughbook laptop computers to EMS providers began.	Completeness	Injury Surveillance/EMS	Increase
Measurement			
Improve the completeness of the Injury Surveillance/EMS core system by increasing the number and percent of electronically collected Patient Care Reports (PCRs) where the baseline was zero prior to first year funding and goal levels are as presented below.			
Measurement Method			
The expected number of electronic PCRs to be submitted and entered into the DPH/OEMS database by June 2009 is 250,000. The percentages below represent the proportion of PCRs submitted and entered for a specific year compared to the number and proportion once the system is fully operational.			

By the end of 2009, this would equal 300,000 PCRs or 75% of the expected number under full operation.																
Measure Description																
Number and percent of electronic PCRs submitted and entered at the State level.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	0	0	16,000/4%	200,000/50%	300,000/75%	400,000/100%										
Final CY			0/0%	200,000/50%												
<table><tr><td>Difference:</td><td>2006-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td>0/0%</td><td>200,000 50%</td><td>300,000 25%</td><td>400,000 25%</td></tr></table>							Difference:	2006-2007	2007-2008	2008-2009	2009-2010		0/0%	200,000 50%	300,000 25%	400,000 25%
Difference:	2006-2007	2007-2008	2008-2009	2009-2010												
	0/0%	200,000 50%	300,000 25%	400,000 25%												

Injury Surveillance/EMS – Uniformity						
Measure ID: CT-M-00019						
Status		Performance Area		System		Direction
1-1-07 Required EMS PCR software EMS providers use be Gold NEMSIS compliant		Uniformity		Injury Surveillance/EMS		Increase
Measurement						
Improve the uniformity of the Injury Surveillance/EMS core system in terms of an increase in the percent of PCRs in compliance with Gold NEMSIS data requirements where the baseline level was zero before first year funding and goal levels are as presented below.						
Measurement Method						
All NEMSIS data will be collected with Gold standard software. In actuality, the number of NEMSIS data elements captured in each case will depend on the seriousness of the 911 call for service.						
Measure Description						
Number and percent of PCRs where NEMSIS data elements are collected recognizing collection of NEMSIS data is dependent upon the seriousness of the 911 call for service.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	0	0	0/0%	200,000/50%	300,000/75%	400,000/100%
Final CY			0/0%	200,000/50%		
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	
		0/0%	200,000/50%	300,000/25%	400,000/25%	

The TRCC's second proposed set of safety data project(s) for performance measurement is in the Crash core system area and the performance areas to be addressed include completeness, uniformity, and timeliness.

While the TRCC was not successful in proposing funding for a crash data repository, work will continue with ConnDOT, the CAPTAIN Electronic PR-1 and Citation Local Law Enforcement pilots project and the Connecticut State Police (CSP) and Local Law Enforcement NexGen pilots that will allow for the electronic submission and retrieval of crash data.

Crash/ConnDOT – Completeness																
Measure ID: CT-M-00001																
Status		Performance Area		System		Direction										
1 <sup>st</sup> Qtr of 2007, over 7,000 local road PDO crashes were coded/ entered by ConnDOT Accident Records.		Completeness		Crash		Increase										
Measurement																
Improve the completeness of the crash system in terms of an increase in the number and percent of local road PDO crashes added to the ConnDOT accident file, where the baseline level was zero before funding and goal levels as presented below.																
Measurement Method																
The number represents the actual of number of electronic PR-1 reports added to the ConnDOT crash file. The percent represents the portion of expected local road PDO crash reports statewide once the system is fully operational. As of April 2009, 35,258 local road PDOs crashes for calendar year 2007 had been coded, while 14,613 had been coded thus far for calendar year 2008.																
Measure Description																
Number and percent of local road PDO crashes.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	0	0	35,258 99%	14,613/35,000 99%	35,000 99%	35,000 99%										
Final CY																
<table><tr><td>Difference:</td><td>2006-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td>35,258 99%</td><td>0</td><td>0</td><td>0</td></tr></table>							Difference:	2006-2007	2007-2008	2008-2009	2009-2010		35,258 99%	0	0	0
Difference:	2006-2007	2007-2008	2008-2009	2009-2010												
	35,258 99%	0	0	0												

Crash/CSP – Completeness			
Measure ID: CT-M-00016			
Status	Performance Area	System	Direction
Last quarter of 2006 CSP initiated use of electronic PR-1 for all crash data collection - all reportable crashes	Completeness	Crash	Increase

Measurement																
Improve the completeness of the crash system in terms of an increase in the number and percent of CSP reported local road PDO crashes submitted to the CSP server where the baseline level for the ConnDOT accident file was 0 before first year funding and goal levels are as presented below.																
Measurement Method																
The actual number of electronic PR-1 reports for local road PDO crashes entered on the CSP server and provided in hardcopy to ConnDOT by the end of 2007 was 620. The percent represents the portion of expected CSP reported local road PDO crash reports statewide once the system is fully operational.																
Measure Description																
Number and percent of CSP reported local road PDO crashes.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	0	0	620/1,800 85%	2,100 99%	2,100 99%	2,100 99%										
Final CY																
<table><tr><td>Difference:</td><td>2006-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td>1,800 85%</td><td>300 14%</td><td>0</td><td>0</td></tr></table>							Difference:	2006-2007	2007-2008	2008-2009	2009-2010		1,800 85%	300 14%	0	0
Difference:	2006-2007	2007-2008	2008-2009	2009-2010												
	1,800 85%	300 14%	0	0												

Crash/CAPTAIN – Completeness			
Measure ID: CT-M-00022			
Status	Performance Area	System	Direction
CAPTAIN crash data collection software	Completeness	Crash	Increase
Measurement			
<p>Improve the completeness of the crash system in terms of an increase in the number and percent of jurisdictions using CAPTAIN software for electronically collecting and submitting PR-1 crash data (to include local road PDO crashes) to the CROCOG server. The baseline level for submitting electronic PR-1 crash data including local PDO crashes to the ConnDOT crash file is zero prior to funding and goal levels are as presented below. The PR-1 contains 48 of the 77 MMUCC data elements although only 23 MMUCC data elements are included on the ConnDOT crash file.</p> <p>CROCOG has established a data sharing initiative among its member towns. This new effort is supported by funds made available by the State of Connecticut. While all member towns have agreed to participate in this initiative, some towns will take considerably longer to fully subscribe. Hence, the measurement method is two-fold and explained below. It is also important to understand that because of funding limitations, <u>not</u> every law enforcement vehicle in each town will be equipped with CAPTAIN software. It will be only possible to equip that proportion of vehicles that are primarily involved in traffic safety related activities and are most likely to be involved in completing crash reports or issuing citations.</p>			
Measurement Method			
The first number is quantitative and represents the number of CAPTAIN towns in the Capitol Region participating in the PR-1 electronic collection and submission pilot. The second number is the fraction of the CAPTAIN towns in the Capitol Region whose crash reports are being submitted to the repository electronically.			

Measure Description						
Number and percent of CAPTAIN jurisdictions collecting and submitting local road PDO crashes electronically.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	0	-		10 towns/ 25%	20 towns/ 50%	35 towns/ 87.5%
Final CY						
Difference:		2005-2007	2007-2008	2008-2009	2009-2010	
		0	0	10 towns/ 25%	15 towns/ 37.5%	

Crash/CSP – Uniformity						
Measure ID: CT-M-00008						
Status		Performance Area		System		Direction
Last quarter 2006 CSP initiated use of electronic PR-1 for all crash data collection for all reportable crashes		Uniformity		Crash		Increase
Measurement						
Improve the uniformity of the crash system in terms of an increase in the number and percent of CSP reported complete electronic PR-1 reports (including 48 MMUCC elements) on the Connecticut State Police (CSP) server where the baseline level for the DOT accident file was 0 before funding and goal levels are as presented below. While the PR-1 contains 48 of the 77 MMUCC data elements, only 23 MMUCC data elements are included on the ConnDOT crash file.						
Measurement Method						
Baseline level for the ConnDOT accident file is documented in the 2004 and 2007 Traffic Records Assessments. The number represents the actual number of electronic PR-1 reports added to the CSP server. In calendar year 2007, 38,500 electronic PR-1s were added to the CSP server. In calendar year 2008, 32,700 were added. The percent represents the portion of expected numbers of PR-1 reports statewide for the CSP with the system fully operational.						
Measure Description						
Number and percent of electronic PR-1 reports added to the CSP server.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	0	0	38,500 99%	32,700 99%	30,000 99%	30,000 99%
Final CY						

Crash/CAPTAIN – Uniformity																
Measure ID: CT-M-00021																
Status		Performance Area		System		Direction										
CAPTAIN crash data collection software is used to electronic collect PR-1 crash data for all reportable crashes		Uniformity		Crash		Increase										
Measurement																
<p>Improve the uniformity of the crash system in terms of an increase in the number and percent of jurisdictions using CAPTAIN for electronically collecting and submitting PR-1 crash data (including 48 MMUCC elements) that include local road PDO crashes to the CROCOG server. The baseline level for submitting electronic PR-1 crash data including local PDO crashes to the ConnDOT crash file was zero prior to funding and goal levels are as presented below. Note, that the PR-1 contains 48 of the 77 MMUCC data elements although only 23 of the MMUCC data elements are included on the ConnDOT crash file.</p> <p>CROCOG has established a data sharing initiative among its member towns. This effort will replace CAPTAIN crash data collection with a new set of software that will provide either an interface for participating towns to submit crash data or a revised data collection facility that will add it directly to a shared database. This new effort is supported by regional service sharing funds made available by the State of Connecticut. While all member towns have agreed to participate in this initiative, some towns will take considerably longer to fully subscribe. Hence, the measurement method is two-fold and explained below.</p>																
Measurement Method																
<p>The first number is quantitative and represents the number of CAPTAIN towns in the Capitol Region participating in the PR-1 electronic collection and submission pilot. The second number is the fraction of the CAPTAIN towns in the Capitol Region whose crash reports are being submitted to the repository electronically.</p>																
Measure Description																
Number and percent of CAPTAIN jurisdictions collecting and submitting local road PDO crashes electronically.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	0	-		10 towns/ 25%	20 towns/ 50%	35 towns/ 87.5%										
Final CY																
<table><tr><td>Difference:</td><td>2005-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td>0</td><td>0</td><td>10 towns/ 25%</td><td>15 towns/ 37.5%</td></tr></table>							Difference:	2005-2007	2007-2008	2008-2009	2009-2010		0	0	10 towns/ 25%	15 towns/ 37.5%
Difference:	2005-2007	2007-2008	2008-2009	2009-2010												
	0	0	10 towns/ 25%	15 towns/ 37.5%												

Crash/CSP – Timeliness																
Measure ID: CT-M-00007																
Status		Performance Area		System		Direction										
Last quarter 2006 CSP initiated use of electronic PR-1 for all crash data collection for all reportable crashes		Timeliness		Crash		Increase										
Measurement																
Improve the timeliness of the crash report system in terms of a reduction in the number of months to provide/make available a PR-1 crash report to the ConnDOT crash file where the baseline was 12 months and the goals levels are as provided.																
Measurement Method																
Baseline level for the ConnDOT accident file is documented in the 2004 and 2007 Traffic Records Assessments. The number represents the number of months required to submit an electronic PR-1 report to the CSP server with subsequent upload to the ConnDOT crash file. The percent represents the portion of the expected numbers of PR-1 reports collected statewide by the CSP once the system is fully operational. By the end of 2008, this equaled 32,700 reports or 99% of the expected statewide total for the CSP.																
Measure Description																
Number and percent of total of electronic PR-1 reports submitted to the CSP server and subsequently uploaded to the ConnDOT server.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	12	12	3 83%	3 99%	2 99%	1 99%										
Final CY																
<table><tr><td>Difference:</td><td>2006-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td>9</td><td>0</td><td>1</td><td>1</td></tr></table>							Difference:	2006-2007	2007-2008	2008-2009	2009-2010		9	0	1	1
Difference:	2006-2007	2007-2008	2008-2009	2009-2010												
	9	0	1	1												
Citation/Adjudication – Timeliness																
Measure ID: CT-M-00009																
Status		Performance Area		System		Direction										
Underway		Timeliness		Citation/Adjudication		Increase										
Measurement																
Improve the timeliness of the citation/adjudication data system in terms of an increase in the percent of citations received by CIB/the courts within 14 days of any electronically issued citation (related to CT-M-00002).																
Measurement Method																

Measure Description						
Percent of electronic citations received by the CIB/courts within 14 days.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	99%	99%	99%	99%
Final CY						

Citation/Adjudication – Timeliness						
Measure ID: CT-M-00002						
Status		Performance Area		System		Direction
Underway		Timeliness		Citation/Adjudication		Increase
Measurement						
Improve the timeliness of the citation/adjudication system in terms of an increase in the percent of citations received by courts/CIB within 10 days.						
Measurement Method						
Measure Description						
Percent of citations received by courts/CIB within 10 days.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	75%	80%	85%	90%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication – Timeliness			
Measure ID: CT-M-00009			
Status	Performance Area	System	Direction
Underway	Timeliness	Citation/Adjudication	Increase
Measurement			
Improve the timeliness of the citation/adjudication system in terms of an increase in the percent of citations received by the courts/CIB within 14 days ( <i>related to CT-M-00002</i> ).			

Measurement Method						
Measure Description						
Percent citations received by courts/CIB within 14 days.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	99%	99%	99%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication – Timeliness						
Measure ID: CT-M-00010						
Status		Performance Area		System		Direction
Underway		Timeliness		Citation/Adjudication		Increase
Measurement						
Improve the timeliness of the citation/adjudication system in terms of an increase in the percent of cases transferred from CIB to courts that are processed within 90 days of receipt.						
Measurement Method						
Measure Description						
Percent of cases transferred from CIB to courts that are processed within 90 days of receipt.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	70%	75%	80%	85%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication/Driver – Timeliness			
Measure ID: CT-M-00011			
Status	Performance Area	System	Direction
Underway	Timeliness	Citation/Adjudication	Increase
Measurement			
Improve the timeliness of the citation/adjudication system in terms of an increase in the percent of convictions sent to DMV within 10 days of the conviction.			

Measurement Method						
Measure Description						
Percent of convictions sent to DMV within 10 days of the conviction.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	85%	90%	95%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication – Integration						
Measure ID: CT-M-00003						
Status		Performance Area		System		Direction
Underway		Integration		Citation/Adjudication		Increase
Measurement						
Improve the integration of the citation/adjudication system in terms of an increase in the percent of TCAS citation data linked to DMV license information.						
Measurement Method						
Measure Description						
Percent of TCAS citation data linked to DMV license information.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	85%	90%	95%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication – Integration			
Measure ID: CT-M-00004			
Status	Performance Area	System	Direction
Underway	Integration	Citation/Adjudication	Increase
Measurement			
Improve the integration of the citation/adjudication system in terms of an increase in the percent of TCAS citation data linked to CIB.			

Measurement Method						
Measure Description						
Percent of TCAS citation data linked to the CIB.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	80%	90%	95%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication/Vehicle – Integration						
Measure ID: CT-M-00012						
Status		Performance Area		System		Direction
Underway		Integration		Citation/Adjudication		Increase
Measurement						
Improve the integration of the citation/adjudication system in terms of an increase in the percent of TCAS citation data linked to DMV vehicle registration information.						
Measurement Method						
Measure Description						
Percent of TCAS citation data linked to DMV vehicle registration information.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	85%	90%	95%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

Citation/Adjudication/Crash – Integration			
Measure ID: CT-M-00013			
Status	Performance Area	System	Direction
Underway	Integration	Citation/Adjudication	Increase
Measurement			
Improve the integration of the citation/adjudication system in terms of an increase in the percent of crash related citation data linked to crash data.			

Measurement Method																
Measure Description																
Percent of crash related citation data linked to crash data.																
	Baseline	2006	2007	2008	2009	2010										
Goal CY	-	-	50%	75%	95%	97%										
Final CY																
<table><tr><td>Difference:</td><td>2006-2007</td><td>2007-2008</td><td>2008-2009</td><td>2009-2010</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>							Difference:	2006-2007	2007-2008	2008-2009	2009-2010					
Difference:	2006-2007	2007-2008	2008-2009	2009-2010												

Citation/Adjudication – Integration						
Measure ID: CT-M-00014						
Status		Performance Area		System		Direction
Underway		Integration		Citation/Adjudication		Increase
Measurement						
Improve the integration of the citation/adjudication system in terms of an increase in the percent of vehicular misdemeanors and arrests linked to the criminal record and motor vehicle system (CRMVS).						
Measurement Method						
Measure Description						
Percent of vehicular misdemeanors and arrests linked to the CRMVS.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	50%	75%	95%	97%
Final CY						

Citation/Adjudication – Accessibility			
Measure ID: CT-M-00005			
Status	Performance Area	System	Direction
Underway	Accessibility	Citation/Adjudication	Increase

Measurement						
Improve the accessibility of the citation/adjudication system in terms of an increase in the percent of data and system availability.						
Measurement Method						
Measure Description						
Percent of data and system availability.						
	Baseline	2006	2007	2008	2009	2010
Goal CY	-	-	90%	95%	97%	99%
Final CY						
Difference:		2006-2007	2007-2008	2008-2009	2009-2010	

**Project Summaries / Progress**

The first three projects concern the electronic capture, submittal and payment processing of citation data. Two of these represent new projects. The fourth project represents a continuation of a four year effort to provide Toughbook computers and Gold NEMSIS compliant software to EMS providers for patient care reporting. The fifth also represents a four year effort to incorporate electronic reporting of crash data to the DOT, GPS-GIS applications for route and cumulative mileages and for state highway mapping, and file linkage for crash, roadway and ADT data.

The five projects selected by the TRCC, and listed on the following pages, include:

- Electronic Citation Processing System
- Electronic Payment Processing System
- E-Citation Pilots for Local Law Enforcement
- Emergency Medical Services Patient Care Report Data Collection System
- E-Crash Reporting to DOT/GPS-GIS/Crash-Roadway-ADT File Integration

The electronic capture and submittal of traffic safety data almost always results in more timely, accurate, complete and consistent (uniform) data at both the capture and submittal phases of the data process. The electronic data capture and submittal processes also facilitate the integration of safety data files to either provide for or corroborate data. Improving the timeliness, accuracy, completeness and consistency of traffic safety data benefits data users in more readily identifying traffic safety problems, in developing appropriate countermeasures and in evaluating countermeasures. Another benefit to the electronic capture and submittal of traffic safety data is that efficiencies are inevitably gained at the points of data collection and submittal.

For the past three years, project summaries have been generated using the following template, recommended by NHTSA.

Project Title:

Project ID:

Core System: (Crash – Driver – Vehicle – Roadway – Citation/Adjudication – EMS/Injury)

Performance Area: (Accuracy – Timeliness – Completeness – Accessibility – Uniformity – Integration)

Lead Agency:

Partner Agencies:

Project Director/Primary Contact:

Project Description:

Basis for Project:

Expected Impact:

Project Priority:

Project Milestones:

Projected Budget by Funding Source:

Project Status:

**Electronic Citation Processing System****Project ID:** CT-P-00009**Core System:**

- Citation/Adjudication

**Performance Area:**

- Completeness
- Uniformity
- Timeliness

**Project Title:** Electronic Citation Processing System**Lead Agency:** State of Connecticut Judicial Branch – Court Operations, Centralized Infractions Bureau**Partner Agencies:**

- State and Local Law Enforcement Agencies

**Project Director/Primary Contact:**

Name: Stacey B. Manware  
Title: Clerk, Centralized Infractions Bureau  
Agency: State of Connecticut Judicial Branch  
Office: Centralized Infractions Bureau  
Address: 225 Spring Street  
City, ZIP: Wethersfield 06109  
Phone: 860-263-2750  
Email: Stacey.Manware@jud.ct.gov

**Project Description:**

The creation of an application that enables the receipt by the Centralized Infractions Bureau of electronically captured citations data, where in Phase I the data will be printed and used for scanning and data entry at CIB, and subsequently, in Phase II, a full production release in which the data will be automatically populated into the CIB automated system.

**Basis for Project:**

The citation system in Connecticut is a manual system which is vulnerable to human error. Information from handwritten tickets is data entered and subsequently transmitted to various entities. Exception processing is time consuming. An electronic method of creating tickets and ultimately populating the Centralized Infractions Bureau database would significantly improve processing times and the accuracy of the information processed.

- This project would serve as a complement to the CRCOG Citation Pilot through ultimately building a back-end process for electronic traffic citation.
- Based on 2004 Traffic Records Assessment and 2006 Strategic Plan, there is no electronic statewide roadside data capture system for traffic citations.

**Expected Impact:**

It is expected that an Electronic Processing System will create efficiencies in several areas. In Phase One of the pilot, officer handwriting replaced by type-written characters, therefore eliminating some entry errors. Fewer entry errors will result in less exception processing. Less exception processing would improve the timeliness of down stream processing transmissions to the courts and the Department of Motor Vehicle. Phase Two of the project would further minimize data entry, key stroke errors, exception processing, and dissemination of data.

**Project Priority:**

The Electronic Citation Processing System is a medium to long range endeavor due to the necessity of coordinating efforts with local law enforcement agencies, Geographical Area court locations and the Office of Policy and Management.

**Project Milestones:**

Tasks/Milestones	Projected Completion Date	Actual Completion Date
Hire a 2.4 Senior .Net Architect/Developer.	8/1/07	2/1/2008
Analyze data and select XML standard and define judicial MQ structure.	8/31/07	4/1/2008
Document volumes and define hardware/software needs	9/7/07	4/21/2008
Design Centralized Ticket Number Assignment	9/21/07	<sup>1 3</sup> 4/1/2009
Design Intake at the Centralized Infractions Bureau: Audit error handling and reporting module	10/19/07	5/1/2008
Design populate at CIB new fields, file conversions, edits, records written, log records, batch analysis of impacts, online analysis of impacts, image analysis of impact	12/14/07	3/15/2009
Code Audit, Error and Data Entry Reports	1/18/08	6/15/2009
Test Audit, Error and Data Entry Reports	2/15/08	<sup>2 3</sup> 6/15/2009
Release Phase I	2/29/08	<sup>2 3</sup> 6/30/2009
Code populate at CIB, new fields, file conversions, edits, records written, log records, batch analysis of impact, online analysis of impact, image analysis of impact (potential new modules and changes to the existing CIB application.	6/1/08	<sup>2 3</sup> 9/15/2009
Test populate at CIB, new fields, file conversions, edits, records written, log records, batch analysis of impact, online analysis of impact, image analysis of impact (potential new modules and changes to the existing CIB application	8/1/08	<sup>2 3</sup> 10/30/2009

**Notes:**

1. Ticket number assignment methodology could not be finalized until vendors brought on board
2. Projected
3. A number of issues have arisen over the course of this timeline whose resolution has taken precedence and has reordered and delayed tasks: lack of vendor partners (for the client-side development, outside the scope of this project), printer/paper/scanning complications and limitations. Vendor partners are now on board as of Spring, 2009. Printer/paper/scanning issues have been resolved, but have taken months of investigation, meetings, and testing to resolve.

**Projected Budget by Funding Source:**

Funding Source	2006	2007	2008	2009	2010	Total
NHTSA 408		75,000	75,000	75,000		
State Funds		19,000	19,000	19,000		
Total Funds		94,000	94,000	94,000		

**Project Status / Progress:**

Pre-pilot - In progress.

This project continues the development of the back-end process for the electronic capture of citation data by law enforcement. Last year, a Senior Net Architect/Designer was hired to establish and document software and hardware requirements; design the XML schema for data transmittal to CIB; develop the protocol for assignment of citation ticket numbering; develop coding and audit procedures for data quality control; and manage/complete software revisions necessary for the efficient operation of the Electronic Citation Processing System. These activities were completed and coordinated in conjunction with the Department of Public Safety, CAPTAIN and CIDRIS initiatives.

As highlighted, in regards and in preparation for the pre-pilot, recent accomplishments include:

- Testing continues on web services (receiving) application;
- Discussions have been held on security, networking, and database management;
- Review held of draft of "high level architecture and design" document; modifications pending;
- Created drafts of official Electronic Citation templates for distribution to vendors;
- Modified XML schema to reflect transmittal requirements;
- Met with Judicial staff regarding data uploads into the legacy system;
- Working to deliver test files and facilitate testing and any change requirements for legacy uploads;
- Investigated missing records in the statute file, incorporated into the CAPTAIN software application;
- Delivered final printing templates to vendors;
- Designed citation numbering application; and
- Delivered final transmittal requirements; XML

**Electronic Payment Processing System****Project ID:** CT-P-00012**Core System:**

- Citation/Adjudication

**Performance Area:**

- Completeness
- Uniformity
- Timeliness

**Project Title:** Electronic Payment Processing System**Lead Agency:** State of Connecticut Judicial Branch – Court Operations, Centralized Infractions Bureau**Partner Agencies:**

- State and Local Law Enforcement Agencies

**Project Director/Primary Contact:**

Name: Stacey B. Manware  
Title: Clerk, Centralized Infractions Bureau  
Agency: State of Connecticut Judicial Branch  
Office: Centralized Infractions Bureau  
Address: 225 Spring Street  
City, ZIP: Wethersfield 06109  
Phone: 860-263-2750  
Email: Stacey.Manware@jud.ct.gov

**Project Description:**

The creation of an application that enables the receipt by the Centralized Infractions Bureau of electronic payment of all infractions tickets issued in the State of Connecticut.

**Basis for Project:**

This project will complement the State's electronic citation project. The timeliness of disposition of infraction matters where drivers intend to plead nolo and pay their tickets will increase the timeliness and accuracy of this current somewhat manual process. Drivers would also be able to access the system to enter pleas of not guilty without the delay of mailing and human resources for processing. This project will create a web-based automated system to electronically accept credit card payments via the Internet for infractions and certain payable violations. The Centralized Infractions Bureau (CIB) currently processes approximately 435,000 tickets annually which results in revenue of \$30,000,000 to the State of Connecticut. The initial volume of credit card payments is estimated to be 64,000 cases per year; however, this would likely increase as more customers become aware of the web-based payment option.

Giving defendants the option to pay their tickets through the Internet will result in quicker payments to the State with less manual processing by staff at CIB. This will provide the potential to dispose and transfer payment to the Treasurer within days of issuance of the ticket when combined with the E-Citation project.

**Expected Impact:**

- Improved timeliness of the receipt of payment and or transfer to courts via electronic not guilty plea.
- Improved timeliness of disposition of cases and transmission of revenue to the State Treasurer
- Improved accuracy of payments
- Improved customer service

**Project Priority:**

The Electronic Payment Processing System is a medium to long range endeavor due to the necessity of issuing a Request for Proposal and selecting a vendor to create the front end interface.

**Project Milestones:**

Tasks/Milestones	Projected Completion Date	Actual Completion Date
Issue Request for Proposal	7/01/2009	
Select Vendor	10/01/2009	
Vendor Build Front End	12/01/2009	
Begin Acceptance of E-payments	1/01/2010	

**Notes:****Projected Budget by Funding Source:**

Funding Source	2006	2007	2008	2009	2010	Total
NHTSA 408				25,000		
State Funds				6,000		
Total Funds				31,000		

**Project Status:**

This is a new project.

Request for Proposal has been drafted and is waiting processing in Judicial Purchasing for a web-based automated system to electronically accept credit card payments via the Internet, giving defendants the option to pay their tickets through the Internet.

**E-Citation Pilots for Local Law Enforcement****Project ID:** CT-P-00011**Core System:**

- Citation/Adjudication

**Performance Area:**

- Completeness
- Accuracy
- Timeliness

**Project Title:** E-Citation Pilots for Local Law Enforcement**Lead Agency:** Capitol Region Council of Governments (CRCOG)**Partner Agencies:**

- State Judicial Department

**Project Director/Primary Contact:**

Name: Cheryl Assis  
Title: Director of Public Safety  
Agency: CRCOG  
Office: Headquarters  
Address: 241 Main Street  
City, ZIP: Hartford, CT 06106  
Phone: 860-522-2217, extension 236  
Email: cassis@crcog.org

**Project Description:**

This project will continue the roll out of e-citation systems in local law enforcement agencies. Software has already been procured for the existing e-citation effort and printers and scanners will be installed in police vehicles shortly. The existing project covers the Capitol Region and this one will expand the e-citation effort to additional law enforcement agencies in Fairfield and New Haven counties.

The requested grant funds will be used to purchase mobile printers and handheld scanner hardware for law enforcement vehicles within the selected statewide municipalities. It is anticipated that this grant will support the addition of between two hundred fifty and three hundred additional e-citation equipped law enforcement vehicles in the State of Connecticut. Once vehicles are equipped with the required hardware, law enforcement personnel will use CAPTAIN and e-citation software developed under the first phases of the related project to electronically upload collected citation data to the centrally located CRCOG server. The CRCOG server will then upload the citation data electronically to the State of Connecticut's Judicial Centralized Infractions Bureau (CIB). CRCOG and CIB have been working closely to define the e-citation templates and XML schema.

**Basis for Project:**

Automated citation data collection is only available in a few law enforcement jurisdictions. Collection and submission of citation data in the paper oriented manual form is largely an inefficient process.

The use of the e-citation software will reduce data input errors and improve the completeness of the collected data. It should also improve police officer efficiency by reducing the amount of time that officers spend collecting citation data and decrease the time it takes this data to be received by the courts. The CRCOG server interface will provide linkage for law enforcement for querying driver licensing and vehicle data as well as provide a secondary linkage to emergency responders (i.e., EMS, fire, etc.).

### Expected Impact:

Expected impacts include:

- Expand management information and targeted enforcement activities in equipped municipalities
- Improved timeliness of the availability of citation data to the courts
- Improved accuracy and completeness of collected and submitted citation data

### Project Milestones:

Tasks/Milestones	Projected Completion Date	Actual Completion Date
Submit HS-1 grant application to DOT, Transportation Safety Section.	9-01-2009	
Select three pilot towns in advance and collect baseline citation data for the months of July and August. This data would enumerate both crash related and non-crash related enforcement actions using the existing manual systems.	9-15-2009	
Finalize HS1 agreement with the State of Connecticut Transportation Safety Section.	10-15-2009	
Meet with pilot towns and determine the number of officers/vehicles in each town to be equipped with the e-citation pilot system.	11-15-2009	
Purchase and provide pilot towns with printers, scanners, and e-citation software.	12-15-2009	
Install applications in vehicles, including printers, scanners and software.	1-15-2010	
Provide training in use of e-citation data capture software, printers and scanners.	1-30-2010	
Test applications in preparation for pilot towns going live with their e-citation pilots.	2-15-2010	
Initiate the pilot and begin to upload collected citation data to the CRCOG server.	3-01-2010	
Upload citation data from the CRCOG server to the Centralized Infractions Bureau.	3-15-2010	
Continue to provide necessary training and support.	3-30-2010	
Employ a survey instrument for users of the e-citation pilot system: <ul style="list-style-type: none"> <li>• To assess the satisfaction level of the users participating in the pilot;</li> <li>• To assess their impressions of productivity improvements;</li> <li>• To assess citizen satisfaction with the system.</li> </ul>	7-30-2010	
Make the results of the survey available to the TRCC, the Capitol Region Public Safety Council, and the Connecticut Chiefs of Police Association	8-30-2010	
Baseline data from task #2 above will be compared against the sixty day period following the rollout of the program.	9-15-2010	

**Projected Budget by Funding Source:**

Funding Source	2006	2007	2008	2009	2010	Total
NHTSA 408				\$300,000		
Local Funds				75,000		
Total Funds				\$375,000		

**Project Priority:**

Completion of this project will extend over several years. The primary reason for this is the lack of funding to extend the project to include a larger number of towns.

**Project Status:**

This is a new project, which continues the roll out of e-citation systems in local law enforcement agencies.

For Capitol Region law enforcement agencies the software has already been procured and the system only requires the installation of printers and scanners in the police vehicles. After law enforcement in the participating towns is provided the requisite equipment and software, training will be completed.

Because of the struggling economy and severely constricted municipal budgets, the match for this project will be provided in several ways. Towns will be provided a choice of the following options:

1. Participating towns that will be equipping their entire fleet of police vehicles despite being limited to a "seed" number of devices will be credited for the extra dollars that they expend on above "seed" devices toward the collective match.
2. Participating towns may offer all or a part of their match requirement in soft activities such as user training in e-citation, installation and configuration of devices, local system administration including review of issued citations and management reports. In order to qualify for this option, the CRCOG will require pre-approval of the format for recording such activities from the Department of Transportation Office of Highway Safety.
3. Participating towns may simply pay 20% of the cost of the hardware.

**Emergency Medical Services Patient Care Report Data Collection System****Project ID:** CT-P-00001**Core System:**

- Injury Surveillance/EMS

**Performance Area:**

- Improve the timeliness, accuracy and completeness of PCR data.
- Improve access to PCR data for completing analyses for determining the quality of care provided by local EMS providers.
- Improve access to PCR data for other users such as the CODES and NEMSIS projects.

**Project Title:** Emergency Medical Services Patient Care Report Data Collection System**Lead Agency:** Department of Public Health (DPH)/Office of Emergency Medical Services (OEMS)**Partner Agencies:**

- Department of Information Technology (DoIT)
- Department of Public Health/Operations Branch Information Technology Section
- EMS Health Care Providers Statewide

**Project Director/Primary Contact:**

Name: Bill Teel, Ph.D.  
Title: Epidemiologist  
Agency: DPH  
Office: Office of EMS  
Address: 410 Capitol Ave.  
City, ZIP: Hartford, CT 06105  
Phone: 860-509-8116  
Email: bill.teel@ct.gov

**Project Description:**

This project is managed by the Department of Public Health (DPH)/Office of Emergency Medical Services (OEMS). The project provides for the purchase and distribution of Toughbook laptops to all Connecticut EMS providers. Toughbook laptops are provided contingent upon an EMS provider acquiring NEMSIS gold standard compliant Patient Care Reporting (PCR) software to be used to collect patient care data for all patients transported to the ED. Once Oracle software testing was completed on a state server purchased by DPH/OEMS in June 2008, all local EMS providers given Toughbook laptops were required to submit PCR data beginning no later than January 1, 2009. The PCR data is being analyzed to determine the level of patient care provided and how care might be improved. The PCR data will also be made available to the Connecticut Crash Outcome Data Evaluation System (CODES) and the NEMSIS projects.

**Basis for Project:**

Previously there has been no electronic collection of emergency medical services (EMS) patient care data. A central State repository for collected PCR data has also not been available. Consequently the opportunity to review and analyze PCR data to determine the standard of care provided by EMS service

providers has not been possible nor have PCR data been available to other users such as CODES. The DPH, Office of EMS has attempted to ameliorate this circumstance for a number of years. To date, the DPH has spent over \$1,000,000 to develop the backend software to archive and store patient care reports that will be sent by the EMS providers to the Office of EMS.

### Expected Impact:

Impact of the electronic reporting of EMS patient care reports include:

Increase in the number of electronically collected PCRs from zero to 250,000 by June 15, 2009.

Increase in the percentage of electronic PCR data that provide for the collection of Gold NEMSIS compliant data elements from zero prior to funding to 100% by June 15, 2009. The number of NEMSIS data elements captured for each PCR depends on the seriousness of the call for service.

Improve linkage of electronically collected EMS data to ED and inpatient hospital discharge data to obtain outcome and diagnosis data to improve the quality of EMS care.

### Project Priority:

Completion of the EMS electronic patient care reporting system statewide will extend over several years. The primary reason for this is the lack of funding to acquire and distribute Toughbook laptop computers to local EMS providers.

### Project Milestones:

Tasks/Milestones	Projected Completion Date	Actual Completion Date
Release Toughbooks to EMS providers	1-1-2010	
EMS services purchase software	1-1-2009	
Test server software to receive EMS PCR data sent over the Internet	6-30-2007	6-30-2008
Once EMS data starts arriving, develop meaningful metrics to improve patient care	9-31-2008	
Collect 100,000 EMS patient care reports	8-30-2008	2/1/2009
Analyze PCR data (can start with initial data)	6-30-2008	2/1/2009
Generate a report on PCR data	8-15-2008	2/1/2009
Test linkage of PCR/NEMSIS data with CODES data sets	11-1-2008	4/19/2009

### Projected Budget by Funding Source:

Funding Source	2006	2007	2008	2009	2010	Total
NHTSA 408	\$190,000	\$310,000	310,000	\$310,000		
Local Funds	1,000,000	75,000	75,000	\$75,000		
Total Funds	\$1,190,000	\$385,000	\$385,000	\$385,000		

**Project Status:**

The following information was contained in an Interim Progress Report, submitted in April 2009 for the Section 408 application.

Performance Measure used to track improvements: Number of electronically collected EMS patient care reports being added to the database server at the Department of Public Health (DPH)/Office of Emergency Medical Services (OEMS).

Expected Impact of the electronic reporting of EMS patient care reports include:

Increase in the number of electronically collected PCRs added to the database server at the Office of Emergency Medical Services (OEMS).

Increase in the percentage of electronic PCR data that provide for the collection of Gold NEMSIS compliant data elements. The number of NEMSIS data elements captured for each PCR depends on the seriousness of the call for service.

Improve linkage of electronically collected EMS data to ED and inpatient hospital discharge data to obtain outcome and diagnosis data to improve the quality of EMS care.

Narrative of the Improvements: Completeness of electronically collected PCRs added to the OEMS database server from 0 submitted before June 30, 2008 to more than 190,000 cases from June 30, 2008 to April 2009.

Narrative Description of Calculation: Number(s) of electronically collected PCRs added to the OEMS database server for January 2008 to June 30, 2008 compared to the number(s) electronically collected and added to the OEMS server for June 30, 2008 to April 2009.

Date and Baseline Value for the Measure:

Number of Electronically Collected EMS PCRs Added to the OEMS Database Server  
January 2008 to June 30, 2008

	Total EMSPCRs Added to Database
Electronically collected PCRs added to the OEMS database server	0

Date and Current Value for the Measure:

Number of Electronically Collected EMS PCRs Added to the OEMS Database Server  
June 30, 2008 to April 2009

	Total EMSPCRs Added to Database
Electronically collected PCRs added to the OEMS database server	190,993

Note: The DPH Office of Emergency Medical Services has made progress in adding electronically collected PCRs to its database server. Electronic reporting is the only means of PCRs being added to this database, which prior to 2008, did not exist. Progress is expected to continue in the next twelve months.

Plans also include the linkage of EMS data with ED and inpatient hospital discharge data to analyze outcomes and diagnosis to gauge the appropriateness of EMS care received by Connecticut residents, and improve the quality of patient care.

**Electronic Motor Vehicle Accident Reporting CSP to DOT****Project ID:** CT-P-00006**Core System:**

- Crash

**Performance Area:**

- Completeness
- Uniformity
- Timeliness

**Project Title:** E-Crash Reporting to DOT/GPS-GIS/Crash-Roadway-ADT File Integration**Lead Agency:** Connecticut Department of Transportation (ConnDOT)**Partner Agencies:**

- State Department of Public Safety (DPS)
- NexGen Local Law Enforcement

**Project Director/Primary Contact:**

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**Project Description:**

This project is managed by ConnDOT/Planning, Inventory and Data. The project has three phases. Two of the most important objectives of Phase I are for ConnDOT/ARS: to develop and implement an electronic version of the PR-1 to be used by ARS to replace the present DCR system; and a crash data processing system that will provide for the receipt of PR-1 crash data in an electronic data format from the Connecticut State Police (CSP). A server will be provided and managed by the Office of Information Systems (OIS) to house the submitted data. The crash data processing system will allow ConnDOT/ARS staff to edit data fields and to add additional data as necessary. It will also include an office module to allow staff to code data from crash report hard copy. The system will include validity checks, be capable of accessing and managing all applicable roadway files, and be capable of detecting duplicate cases and generating coder productivity statistics. The data will be output in the specified ASCII format for mainframe processing.

It is important to note that only after the completion of Phase I can the electronic submission of crash data from the CSP be initiated. Prior to data submission, it will be necessary to assure that all submitted PR-1 data meet ConnDOT/ARS data validation and edit requirements. Some testing of whether the data meet validation and edit requirements can be accomplished before Phase I is completed. However, some additional testing will remain to assure that the submitted PR-1 data are fully compliant with ConnDOT/ARS validity and edit rules.

A major factor that can facilitate the data validity and edit testing process is the use by CSP of NexGen software for crash data collection. Once ConnDOT/ARS determines what if any validity or edit procedures need to be addressed, changes or modifications to the software can be made by NexGen systems analysts. Changes or modifications to the NexGen PR-1 crash data software can be quickly distributed to other NexGen law enforcement users. It has been repeatedly demonstrated that use of data capture software that includes edit rules that check the accuracy, validity and reliability of the entered data will improve the accuracy and completeness of the collected data. Use of data collection software also improves the efficiency of the data collection process.

Phase II of this project initially focused on ensuring that ConnDOT had a reliable and easy-to-use means of manually entering and editing records so the DCR application could be decommissioned. This work has mostly been completed and is in production. Recent efforts have shifted to implementing a means to automatically import this same information from DPS, including latitude/longitude information not typically present in the paper PR-1s. This component is largely complete and under testing in the development environment.

The next major element of work is making use of the latitude/longitude information to simplify and speed the data entry/validation process and to support future map-based reporting and query capabilities to supplement the current tabular reports. The first steps in this effort have been taken by supplying the coders with easy access to high-resolution on-line maps which they can use to reconcile the police diagrams and narrative with the mile point data from RIS (Roadway Inventory System), accurate to 0.01 miles.

Plans also include the development of an interim interface using the existing RIS information to use until the new GIS system becomes available. This interface would allow ConnDOT to:

1. Automatically select the correct road and mile point from the incoming DPS feed (based on latitude/longitude). Coders would only need to validate that the choice made is consistent with the location description provided by the officer; and
2. Enhance the high-resolution maps being used by the coders with RIS mile points to provide a faster and more accurate way for them to select the best mile point (e.g., clicking on the map rather than selecting from a list or dropdown as they must do currently).

It should be noted that DPS indicates that the NexGen crash data collection software already incorporates a point and click method for exact crash location. It might be advantageous for ConnDOT to examine the extant CSP point and click system for use and compatibility with system(s) ConnDOT is considering.

Phase III focuses on implementing the GIS interface design developed in Phase II and migrating the remaining functionality provided by the Mainframe in the current legacy Accident System. This includes a number of periodic reports such as SLOSS and TASR, creation of a separate reporting database to avoid impacting the interactive data-entry tasks, and selection or development of an ad-hoc Reporting Utility to replace the large number of special-purpose reports which have been developed during the several decades of operation of the legacy system. Replacement of the TAVS (Traffic Accident Viewing System) used both internally and externally, will also need to be addressed.

Phase III also involves the development of a PC database system that will have the same functional capability as the existing mainframe system. This capability will include the ability to input crash data from hardcopy, to edit entered data, to generate reports and complete ad hoc queries and to integrate data from other data files such as roadway and ADT files with the crash file. ConnDOT will also transfer historical data on the mainframe from ASCII file format on cartridge tapes to a relational database on the Department's server. Staff will have the ability to directly view and edit historical cases on the server. A decision will be made on whether the Accident Records Section will continue to maintain its own roadway and ADT files, or if traffic files maintained by other sections can be accessed.

This project also initiates the entry of Property Damage Only (PDO) crash data. PDO crash data were not entered into the state crash data system from 1991 - 2006. Successful completion of Phase III will remove all remaining dependencies on the Mainframe.

**Basis for Project:**

Currently, the Connecticut Department of Transportation (ConnDOT) inputs crash data from hard copy, and State and local law enforcement submit approximately 115,000 police accident report (PR-1) forms to ConnDOT annually. However, only selected data fields from the PR-1's are processed through validity and edit checks and then coded and added to the ConnDOT mainframe accident file.

The current mainframe accident file was established in 1995 as the result of a revision to the PR-1 form. The file currently resides on tapes in an ASCII format. No applications have been developed to read this file, and no relational database file exists to allow ConnDOT to perform ad hoc queries. The file is converted to the pre-1995 format for the production of all reports. Since some information is lost in the conversion process, the data contained in reports produced by ConnDOT do not reflect the data recorded from the PR-1 form.

It should be noted that queries are conducted periodically of the crash file to determine timeliness, completeness, and uniformity.

Specific deficiencies for current reporting of reportable crash data include:

- Crash data entry from hard copy is time-consuming and can potentially introduce error.
- Most of the computer hardware used in the crash data entry process is no longer supported.
- Based on sample cases received at ConnDOT in January and February 2007, the timeliness (average) for law enforcement to complete a paper PR-1 and make it available to ConnDOT for processing is 25 days from the date of the crash. This project emphasizes the entry and availability of crash data more quickly than is currently possible with submission, data entry and availability of crash data received in hard copy.
- No local road PDO crash data (estimated 35,000 crashes per year) were added to the ConnDOT crash file prior to 2007.

**Expected Impact:**

Expected impacts in the electronic reporting of PR-1 crash records from the CSP to ConnDOT include:

- Improve the timeliness, accuracy and completeness of crash data from CSP with emphasis on reducing the time required to submit PR-1 crash reports from CSP to ConnDOT.
- Improve the accuracy of crash location data.
- Improve the completeness of crash data through entry of PDO crash data with emphasis on increasing the total number (both hard copy and electronic) of local road PDO crash reports that are submitted and entered onto the ConnDOT crash file each year.
- Improve the integration of crash data with roadway and ADT files.
- Improve the access of crash data to users.

**Project Priority:**

Completion of this project will extend over several years. How long will be required to complete this project will depend upon the level of funding provided from both state and federal sources.

**Project Milestones:**

Tasks/Milestones	Projected Completion Date	Actual Completion Date
Develop and implement an electronic version of the PR-1 to replace the present DCR system.	1-30-2007	1-30-2007
Train staff on GIS for base mapping and crash location determination.	4-30-2007	4-30-2007
Acquire a server to be maintained by the ConnDOT Office of Information Systems (OIS) for storage of crash data.	7-15-2007	4-30-2007
Develop the protocol for receipt of PR-1 crash data from the CSP.	10-30-2007	5-1-2009
Provide in the data processing system the ability by Department staff to edit crash data fields, verify validity checks and include additional data.	12-30-2007	5-1-2009
Include an office module to allow staff to code data from hard copy.	3-30-2008	5-1-2009
Provide system capability for access and management of all applicable roadway files.	5-30-2008	5-1-2009
Complete output of data in the required ASCII format for mainframe processing.	8-01-2009	
Provide system capability for determination of duplicate crash reports and for production of coder productivity statistics.	8-01-2009	
Provide necessary implementation, testing, training and support, including network analysis and database training, to facilitate roadway network improvements.	8-01-2009	
Assure that all appropriate documentation for system improvements is provided.	10-01-2009	

**Projected Budget by Funding Source:**

Funding Source	2006	2007	2008	2009	2010	Total
NHTSA 406	\$150,000	150,000	150,000			
NHTSA 408				150,000		
State Funds				38,000		
Total Funds	\$150,000	\$150,000	150,000	188,000		

**Project Status:**

The following information was contained in an Interim Progress Report, submitted in April 2009 for the Section 408 application – Local Road Property Damage Only (PDO) Crashes.

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Performance Measure used to track Improvements: Number of property damage only (PDO) crashes being entered into the central crash repository at the CT DOT Accident Records Section.

Improvements Achieved or Anticipated: Completeness of the 2007 crash reporting file is expected to increase by 44 per cent with the addition of local road PDO crashes from 78,606 as of May 2008 to 113,065 crashes as of February 2009.

## Safety Data Improvements - - - - - Section 408 Application

Specification of how Measure is calculated: Number of local road PDO reports received and entered for 2007 crashes (January through September 2007) as of May 2008 compared to the number received and entered from August 2008 to February 2009.

Date and Baseline Value for the Measure:

## January through September 2007 Crash Totals as of May 2008

All State Roads	Local Road Injury	Local road PDO	Total
45,852	7,970	24,784	78,606

Date and Current Value for the Measure:

Local road PDO crashes for 2007 crashes were entered beginning June 1, 2007

## 2007 Crash Totals from August 2008 to February 2009

All State Roads	Local road injury	Local road PDO	Total
66,708	11,099	35,258	113,065

Note: The CT DOT's progress in adding local road PDO crashes to its crash repository continues – The number of local road PDO reports received and entered for 2008 crashes as of April 2009 – 15,144. Work also continues to establish and finalize an xml schema to enable the Department to begin receiving on a pilot basis electronic copies of validated and edited crash reports from the CT State Police and select local jurisdictions.

The following information was contained in an Interim Progress Report, submitted in April 2009 for the Section 408 application – Digitized Roadway Miles.

Performance Measure used to track Improvements: Number of road miles that can be converted from GPS coordinates on the State's GIS system to route number and cumulative mileage that ultimately can be matched with crash reports.

Improvement Achieved: Number of road miles digitized. Ultimately this will lead to integration of crash data with the Department's GIS system to improve the accuracy of the 100,000 plus crash reports received by the Department every year.

Specification of how the Measure is Calculated: Number of road miles completed from January 2008 through May 1, 2008 to number of road miles completed from August 2008 to February 2009.

Date and Baseline Value for the Measure:

Number of Road Miles Converted To Route Number and Cumulative Mileage

## January 2008 through May 1, 2008

Road Category	Total Miles	Miles Completed	Per Cent Completed
Divided Access	1,883.85	126.04	6.69
Non Divided Access	23,171.79	254.96	1.10
Total	25,055.64	381.00	1.52

Date and Current Value for the Measure:

Number of Road Miles Converted To Route Number and Cumulative Mileage  
from August 2008 to February 2009

Road Category	Total Miles	Miles Completed	Per Cent Completed
Divided Access	1,883.85	585	31.05
Non Divided Access	23,171.79	1,415	6.11
Total	25,055.64	2,000	8.00

Note: ConnDOT has made progress in converting GPS coordinates from its GIS system to route number and cumulative mileage on its roadway network. With the full staffing of 8 individuals, progress is expected to continue in the next twelve months.

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Progress is also being made for migration of crash data from the mainframe to a PC data base system. Creation of an electronic version of the PR-1 crash report to replace the present DCR system has been completed.

The Department continues to work with the Department of Public Safety (DPS) to discuss electronic files being transferred to ConnDOT, contained on the IT server and to verify edits of the PR-1.

Once electronic PR-1s being submitted by the DPS have been verified for edit/validity checking and additional changes to the software have been made (if called for), the Department will then move to begin accepting electronic PR-1s from NexGen involved local law enforcement agencies, including the towns of Madison, Branford, East Haven, North Haven, Hamden, Ansonia, Fairfield, North Branford, and Shelton, as well as towns represented in CAPTAIN/CRCOG pilot initiatives.

## Other Potential Projects Considered by the TRCC

The past couple years, the TRCC has considered several other traffic records system projects, but recognized because of funding constraints that these would have to be deferred. Other projects considered:

### Crash Data Repository – Project ID: CT-P-00003

#### Core System:

- Crash

#### Performance Area:

- Completeness
- Uniformity
- Timeliness

#### Project Description:

The purpose of this project is to provide members of the traffic-safety community with timely, accurate, complete and uniform crash data, within 30 days of the crash event, by creating a State Centralized Crash Repository (CCR). The Crash Repository will be designed as an enterprise system and will utilize web services technology. This will allow agencies that capture electronic PR-1 data to submit electronically to the repository, via a system interface. It would also provide a mechanism for agencies without an electronic PR-1 to enter such data via a secured web portal, thus enabling all Connecticut Law Enforcement agencies to participate in this project if they choose to.

#### Basis for Project:

Historically, Connecticut's crash data has been hand-entered from crash forms submitted by law enforcement agencies, and stored in a Centralized Accident Records System (CARS) database located at the Connecticut Department of Transportation. Pilot programs under DPS with the current CAD/RMS vendor Nexgen Solutions submit portions of this data electronically to CARS through the Mobile Records Management Systems. However, the pilots have been limited to the data collected by DPS and several other pilot agencies.

Currently, Connecticut has two disparate crash repositories: one at the Department of Public Safety (DPS); and one at the Connecticut Department of Transportation (CDOT). In addition to two large scaled repositories, there are numerous small scale repositories retained at local police departments throughout the state. Creating an enterprise-level Centralized Crash Repository (CCR), that is technologically progressive, will eliminate the problems that have resulted from having several disparate crash repositories.

This project focuses on designing and building the initial Centralized Crash Repository that will allow law enforcement agencies to submit electronically collected crash information as per XML specification standards, and will make the crash data available to authorized agencies. Specifically, this project will focus on three aspects: 1) CCR database design (phase 1); 2) Writing a crash-specific web service; 3) Building a web front that will display the crash information, allow crash records to be printed as PDF files, and provide access to the crash data via a specified XML protocol.

#### Expected Impact:

Completion of this project will provide members of the traffic-safety community and submitting law enforcement agencies with timely, accurate, complete and uniform crash data, within 30 days of the crash event, by creating a Centralized Crash Repository (CCR). The current process that involves manual entry from submitted handwritten or printed PR-1's is back logged months and involves significant human involvement in the process. This project should significantly streamline data collection process and possible allow reallocation of the currently utilized resources.

#### Project Status:

The concept of a Crash Data Repository was proposed in 2006; however, the proposal lacked a sponsoring agency and failed to receive funding. In 2007, the Repository was again proposed, largely as a result of a "top recommendation" by an independent outside review team, which conducted the State Traffic Records Assessment in March 2007. Once more the proposal failed to move forward, again lacking a sponsoring agency.

This year, the TRCC was close to securing a sponsoring agency to serve as the lead for the development of a State Motor Vehicle Crash Data Repository. Unfortunately, due to time constraints, the TRCC finds itself back in a similar position to previous years, lacking a sponsoring agency for a Crash Data Repository.

Filing PR-1s using Adobe Forms - **PR-1 possibility without a PC in the cruiser** - Law enforcement users would only need to have the Adobe reader. The developer would need to use a special version of the Adobe software to design the PR-1 into a special .pdf file, fillable when only using the reader. This special .pdf file could be posted on any website, or e-mailed to anyone. Files could be restricted so once certain fields (e.g., personal information) were filled in, the file would only allow access by the original officer and the receiving server. Such a restriction would guarantee data confidentiality. It would also be possible to let the officer fill out the form, print it for his own internal uses, and then submit after his internal reviews are complete. When an officer did fill out this Adobe form, he would have a special button to submit. The entire form would be sent to a special Adobe server, which would put the filled out form into XML, ready to upload to the appropriate server/repository.

Data Needs Assessment - **Data collection standards** - There is some evidence to suggest that different data collection standards are being used by law enforcement. This impacts the consistency of the collected data. The State's Attorney General Office has requested a review of the data collection protocols used by law enforcement to determine what measures can be employed to assure more consistent data collection procedures especially as this regards prosecuting of traffic law offenders.

Connecticut State Police (CSP) NexGen eCitation Pilot - **E-Citation Local Law Enforcement** - The NexGen software package contains a module for collecting and reporting citation data. Implementation of this project would expand the electronic citation data collection process to include the CSP and likely some local law enforcement agencies that use the NexGen software.

Driver License Bar Code Pilot - **Driver License Bar Code** - The Connecticut Driver License contains bar coded information. Provision to law enforcement of bar code scanning equipment and software would greatly facilitate collection of driver license data as well as improve the accuracy of the collected data. Use of this hardware and software would also improve the efficiency of the law enforcement officer collecting the data.

Traffic Records Mini Forum - A day to day and a half Mini Forum would provide the opportunity for the Executive level of the TRCC to become informed about the efforts of the TRCC as well as allow mini Forum participants to attend sessions about existing and emerging technologies concerning traffic safety data collection, management and access. The States have generally become more restrictive regarding out-of-state travel and for traffic safety data collectors, managers and users, the mini Forum likely would be their only opportunity to become better informed about those methods and technologies that can improve the traffic records data system. A bi-Regional Conference was held in Mystic, Connecticut in February 2009.

#### **Other Suggestions:**

Additional scanners, printers and other mobile technology for e-Citation/CIDRIS users

Crash/Citation/Incident law enforcement location analysis software accessible by each community

Public policy endorsement of adding e-mail addresses on DMV records for registrations and licenses

Open source, no cost full function accident diagramming tool for both thick and thin client users

Data analysis software/all stakeholders

#### **Other Non-408 Funded Traffic Records System Projects**

##### Connecticut Impaired Driving Records Information System (CIDRIS)

The components of CIDRIS will include electronic roadside data capture of traffic citations, integration/interface of Judicial and DMV information, integration/interface with offender-based data, and a data mart decision support system. The CIDRIS project will lead to more timely and accurate driver, vehicle and enforcement-adjudication data and a records management and tracking system enabling law enforcement, licensing and criminal justice agencies and others to better enforce, adjudicate and impose sanctions against impaired driving offenders.

CIDRIS Update - Where are we now - May 2009

- Pilot Operating Under the Influence (OUI) arrests
- Eliminate the duplication and re-entry of information between agencies
- Provide measured rollout to assure legal sufficiency

Accomplishments

- Over the last 4 years, CJIS Stakeholders have provided invaluable guidance, support, and contributions
- Approved alternative technical architecture with a five year total cost of ownership savings of \$2.2 Million
- Agency integration efforts with CIDRIS are underway between DMV, DCJ, DPS, and Judicial
- CIDRIS contractor (Sierra) is on target, on budget, and on scope to finish work as planned

Benefits

- Positive Return on Investment
- Reliable and timely electronic information exchange between CJIS agencies
- Minimizing or elimination of paper documents transported/delivered from agency to agency
- Increase in the velocity of information flow
- Improvement of information quality by reducing errors and omissions
- Consistent with the Connecticut Information Sharing System (CISS)
- Building on capability to support all arrests statewide

Where are we going?

## April – June 2009

- MOU Approval & Signoff
- DOIT Purchase of CIDRIS Hardware, Software, & Support
- Agency Interface Construction Continues
- Sierra Releases Iterations 1 and 2
- CPCA Interface Pilot Discussions Continue

## July – August 2009

- Sierra Releases Iterations 3 and 4
- System & User Acceptance Testing
- CPCA Interface Pilot Construction Begins

## September – October 2009

- NHTSA Demo in September (Critical Project Milestone)
- System Acceptance
- Deployment
- "Draft" Report for NHTSA

## November – December 2009

- CPCA Interface Pilot Deployments in late 4th Quarter

Information Quality Benchmarks

- NHTSA IQ Benchmarks (timeliness, accuracy, completeness, consistency, integration, accessibility) are similar if not equivalent to Key Performance Indicators (KPI).
  - Ideally, IQ Benchmarks can be monitored via dash boards to support operations, and used to convey performance to executive leadership.
  - CIDRIS is an ideal application to collect the metric data necessary to establish IQ Benchmarks.
  - CIDRIS IQ Benchmarks are initially focused on Operating Under the Influence (OUI) Cases.

Connecticut Department of Motor Vehicles (CTDMV) Enterprise Modernization Project

The Connecticut Department of Motor Vehicles (CTDMV) Enterprise Modernization (EM) project replaces the previous CTDMV Re-Engineering Regulation of Driver Systems (Re-ROD) and Real-time Online (RTOL) Registration System projects. The EM project is designed to reengineer CTDMV's business systems at an enterprise level and to modernize DMV's technology base, data management and information systems employed to support DMV's enterprise-related services.

Key project goals and objectives include, but are not limited to:

- Modernize CTDMV's business and technical systems;
- Provide standardization and integration of business processes and support systems from both a business and technology perspective;
- Provide a timely response to citizens, governmental agencies, businesses and other entities requesting services and information;
- Efficiently process key business/customer transactions such as registration, title, license, sanction and cashing;
- Review and update our current core business processes and establish new business requirements that will be used as the basis for our technology modernization;
- Develop a customer centric enterprise RDBMS and business intelligence environment;
- and Pursue a number of internal initiatives to prepare the Request for Proposal (e.g., to develop and implement strategies for data cleansing of the agency's customer information).

#### Commercial Vehicle Accident Reporting System (CVARS)

Funding: All funding provided by the Federal Motor Carrier Safety Administration (FMCSA)

Funding for CVARS continues primarily to the Connecticut State Police who have incorporated Commercial Vehicle Crash reporting software into the NexGen software platform. The NexGen Commercial Vehicle Crash reporting software has also been made available to local law enforcement.

#### Federal Highway Administration (FHWA)

Funding: All funding provided by the FHWA

FHWA has funded purchase of servers for ConnDOT to serve as a repository for crash data where GPS coordinated data on the PR-1 crash form has been converted to route number and cumulative mileage (refer to 4<sup>th</sup> year Section 408 proposed project, titled E-Crash Reporting to DOT/GPS-GIS/Crash-Roadway-ADT File Integration).

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<sup>1</sup> The traffic engineer planning to resurface a road, the city planner developing safe school routes, the high school driver education teacher planning a curriculum, the public works director applying for a State grant for reconstructing a hazardous intersection, the sergeant targeting selective enforcement, the motor vehicle administrator, the highway safety planner as well as other stakeholders need timely and complete motor vehicle traffic crash information.

<sup>2</sup> For the 2009 Section 408 Application, changes were made to the letter of delegation representing two of the core safety data systems, Roadway, and Motor Vehicle Crash.

<sup>3</sup> TRCC stakeholders include representatives, who remain fairly active in attending meetings and participating in the decision making of the committee, and advisors, whose input to the TRCC is vital, but who are unable to participate as actively as others.

<sup>4</sup> Use of the MMUCC Guideline is voluntary. The Model Minimum Uniform Crash Criteria (MMUCC) Guideline was updated in 2008, and published as the 3<sup>rd</sup> Edition.

<sup>5</sup> Commercial Vehicle Analysis Reporting System (CVARS) project – In 2006, the Connecticut State Police (CSP) began the electronic capture and transfer of PR-1 crash reports to the Commercial Vehicle Safety Division (CVSD) within the Department of Motor Vehicles for subsequent upload to SafetyNet.

<sup>6</sup> Most crash data collected by State and local law enforcement agencies are stored on local servers. Whether the data are collected in hard copy or electronically, hard copies of the report are mailed or faxed to ConnDOT. One of the most important objectives of the TRCC is the development and implementation of a procedure that allows PR-1 crash reports to be electronically uploaded from local and CSP servers to the ConnDOT crash file server.

<sup>7</sup> Verified by the Manager of the Accident Records Section in the 2006 Section 408 Application.

<sup>8</sup> Review conducted by InfoGroup, Inc., technical advisor to the State TRCC.

<sup>9</sup> The Gold Compliance rating means that all EMS services must use the 400+ elements in the NEMSIS 2.2.1 Data Dictionary, with full XML compliance built into the software.

<sup>10</sup> CARE a public domain, user-friendly analytical procedure that facilitates analysis of crash data. CARE was developed with NHTSA funding.